DOCUMENT RESUME

ED 356 325 CE 063 376

TITLE	Custom Sewing, Modules One, Two, and Three. Instructor Guide.
INSTITUTION	Missouri Univ., Columbia. Instructional Materials Lab.
SPONS AGENCY	Missouri State Dept. of Elementary and Secondary Education, Jefferson City. Div. of Vocational and Adult Education.
PUB DATE	93
NOTE	535p.
AVAILABLE FROM	Instructional Materials Laboratory, University of Missouri, 2316 Industrial Drive, Columbia, MO 65202 (Module 1 (40-2201-I): $11.50; Module 2 (40-2202-I): $26.50; Module 3 (40-2203-I): $17.50).
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF02 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Clothing Instruction; Competence; Competency Based Education; Course Content; Fashion Industry; Learning Modules; Lesson Plans; *Needle Trades; Occupational Home Economics; Postsecondary Education; Secondary Education; *Sewing Instruction; *Sewing Machine Operators; State Curriculum Guides; Teaching Guides; Teaching Methods; Test Items; *Textiles Instruction; Transparencies; Units of Study; Vocational Education

ABSTRACT

This document consists of three modules designed for a custom apparel and garment sewing program teaching students to construct, alter, and prepare garments and home fashions to customer specifications. Each module includes some or all of the following components: performance objectives, lesson plans, suggested activities, information sheets, transparency masters, handouts, assignment sheets, job sheets, a unit test, and answers to the unit test. All units are competency based and cross-referenced to a competency profile at the beginning of the module. Module One covers the following units: (1) fabrics and textiles; (2) adjusting the home sewing machine; and (3) overlock machines. Module Two covers: (4) construction techniques; (5) applying fasteners; (6) applying trims and finishes; (7) windows and beds. Module Three covers: (8) measuring and fitting problems; (9) altering ready-made products; and (10) altering flat patterns. Two appendixes in each module consists of the following: (1) a list of resources including 22 books and curriculum guides, 7 sets of leaflets, 9 sources of videos and the titles available from each, 2 sources of computer software and the programs available from each, and 5 sewing publications; and (2) a glossary of 200 sewing terms. (KC)

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CUSTOM SEWING, MODULE 1

Unit I: Fabrics and Textiles

Unit II: Adjusting the Home Sewing Machine

Unit III: Overlock Machines

Produced by the
Instructional Materials Laboratory
University of Missouri-Columbia
8 London Hall
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Catalog No. 40-2201-I
1993

The activity which is the subject of this report was supported in whole or in part by funds from the Department of Elementary and Secondary Education, Division of Vocational and Adult Education. However, the opinions expressed herein do not necessarily reflect the position or policies of the Missouri Department of Elementary and Secondary Education or the Division of Vocational and Adult Education, and no official endorsement should be inferred.

ACKNOWLEDGMENTS

Appreciation is expressed to the many individuals who gave their time, knowledge, and talents to the development of this curriculum guide. A special thanks is extended to the following persons for:

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FOREWORD

The Custom Sewing guide, which has been divided into three modules, is appropriate for the 20.0304 Custom Apparel/Garment Seamstress program which prepares individuals to construct, alter, and prepare garments to customer specifications.

Custom Sewing has been developed not only as a curriculum guide, but also to provide the teacher with competency-based instruments for planning and evaluation, resource lists, suggested activities, and a wide variety of hands-on student materials. The guide is intended to provide a framework for instruction in custom sewing that the teacher can localize, personalize, and supplement to fit the needs of students, area of study, and individual teaching and learning styles.

This guide includes **Module 1:** Fabrics and Textiles, Adjusting the Home Sewing Machine, and Overlock Machines; **Module 2:** Construction Techniques, Applying Fasteners, Applying Trims and Finishes, and Windows and Beds; and **Module 3:** Measuring/Fitting Problems, Altering Ready-Made Products, and Altering Flat Patterns. While this guide was developed for the Custom Apparel/Garment Seamstress program, it is appropriate for use in other clothing and textiles classes.

CUSTOM SEWING, MODULE 1

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CUSTOM SEWING

COMPETENCY LIST

A. Using Fabrics and Textiles

   1. Identify unknown fibers
   2. Use textile labels to make fabric comparisons
   3. Rate dye methods on fabrics for penetration and effectiveness
   4. Rate quality characteristics of fabrics
   5. Coordinate patterns with fabrics
   6. Work with napped fabrics
   7. Work with interlock (double) knits
   8. Work with even and uneven plaids
   9. Straighten fabric grain
   10. Pretreat fabric, notions, and trims
   11. Lay out and cut pattern pieces correctly for the type of fabric used

B. Taking Measurements

   1. Prepare customer for measurement
   2. Chart woman's measurements
   3. Chart man's measurements
   4. Measure windows for drapery construction
   5. Measure bed for bedspread construction/dust ruffle construction

C. Altering Ready-Made Products or Pattern Design

   1. Add/eliminate seam
   2. Add/eliminate cuffs (sleeve and pants)
   3. Change collar and/or lapels
   4. Shorten/lengthen collar
   5. Add/eliminate yoke
   6. Remove pleats
   7. Add/remove flair (pants and skirt)
   8. Change darts (location and curve)
   9. Change location of fasteners (e.g., buttons, buttonholes, zippers)
   10. Change/substitute types of fasteners
   11. Change pocket (inseam, hip, welt)
   12. Make insets (alter width, length)
   13. Make facing pattern
   14. Make lining patterns
   15. Adjust waists
   16. Adjust widths of garments or products
   17. Adjust lengths of garments or products
   18. Shorten sleeves
   19. Reweave hole in garment/product

D. Adjusting the Home Sewing Machine

   1. Adjust lower thread tension

2. Adjust presser foot pressure
3. Adjust upper thread tension
4. Clean machine
5. Clear bobbin hook race
6. Replace needle

E. Adjusting the Home Overlock Machine

1. Thread the overlock machine
2. Adjust tensions
3. Clean machine
4. Replace needles

F. Demonstrating Construction Techniques

1. Transfer pattern markings
2. Attach underlining/interlining
3. Attach lining
4. Hem garment/product
5. Apply interfacing (fusible and nonfusible)
6. Staystitch garment/product pieces
7. Apply stay strip
8. Construct dart
9. Construct seam
10. Ease/gather fullness into seam
11. Construct a patch pocket
12. Apply topstitching
13. Construct an inseam pocket
14. Construct a welt pocket
15. Construct a front hip pocket
16. Perform understitching
17. Construct collar
18. Construct facing
19. Construct jacket collar and lapels
20. Construct shirt tab (neckline placket)
21. Attach sleeve placket
22. Construct sleeve cuff
23. Construct set-in sleeve
24. Construct kimono sleeve
25. Construct gusset
26. Construct raglan sleeve
27. Construct pants cuffs
28. Construct pleat
29. Construct tuck
30. Construct ruffle
31. Construct waistband
32. Construct belt loops/carriers
33. Construct casing (fold down and applied)
34. Construct lingerie strap guard
35. Miter corner
36. Baste garment/product together for fitting

37. Fit garment/product
38. Remove spots and stains
39. Press completed garment/product
40. Construct draperies
41. Construct bedspread (tailored and with bed ruffle)

G. Applying Fasteners

1. Attach buttons (sew-through and shank)
2. Construct buttonholes and loops
3. Attach eyelets
4. Attach snaps (sew-through and gripper)
5. Attach hook and eye
6. Attach tape fasteners (i.e., Velcro®, snaps, hook and eye, etc.)
7. Construct belt
8. Insert zippers

H. Applying Trims and Finishes

1. Apply applique
2. Apply braids
3. Apply cording/piping
4. Apply decorative stitches (by machine and by hand)
5. Apply lace
6. Apply lettuce (ripple) edging
7. Apply sequins
8. Apply beading
9. Smock pieces
10. Construct continuous bias strip
11. Construct cording
12. Construct piping
13. Construct tubing

I. Altering Flat Patterns

1. Adjust pattern for neckline differences
2. Adjust pattern for shoulder differences
3. Adjust pattern for arm differences
4. Adjust pattern for chest/bust differences
5. Adjust pattern for back differences
6. Adjust pattern for waist differences
7. Adjust pattern for abdomen differences
8. Adjust pattern for hip/buttock differences
9. Adjust pattern for thigh differences
10. Adjust pattern for crotch differences
11. Adjust pattern for leg length differences
12. Lengthen/shorten pattern
13. Increase/decrease width of pattern
14. True pattern seamlines after adjustment

Custom Sewing

Fabrics & Textiles
Unit I

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1					1-12, 38	
-	2	1, 2	1			34-35	
A1	3		2		1	20	
A2	4					31	
A3	5					50-53	
A4	6			1		21, 43, 48	
A5	7		3		2	24, 47	
A6	8					29, 49	
A7	9		4		3	13-19, 27	
A8	10	3				37, 39-40, 42, 44-45	
A8	11				4	41	
A9	12	4			5	28, 32, 46	
A10	13			2		22	
A11	14		5	3	6	23, 25-26, 30, 33, 36	

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

FABRICS AND TEXTILES

UNIT I

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to distinguish quality fabrics; coordinate patterns, fabrics and notions; work with plaids and napped fabrics; and know how to lay out and cut pattern pieces correctly. Competencies will be demonstrated by correctly performing the procedures outlined in the Assignment and Job Sheets and by scoring at least 85 percent on the Unit Test.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Based on the content outline, MATCH FABRIC TERMS WITH THEIR DEFINITIONS by achieving 100 percent accuracy on the Unit Test.

2. Based on the content outline, Transparency Masters 1, 2, and Handout 1, IDENTIFY CHARACTERISTICS OF NATURAL AND MAN-MADE FIBERS by achieving 100 percent accuracy on the Unit Test.

3. Based on the content outline and Handout 2, IDENTIFY FABRIC BLENDS AND UNKNOWN FIBERS by completing Job Sheet 1 and by achieving 100 percent accuracy on the Unit Test.

4. Based on the content outline, USE TEXTILE LABELS TO MAKE FABRIC COMPARISONS by achieving 100 percent accuracy on the Unit Test.

5. Based on the content outline, IDENTIFY AND RATE DYE METHODS by achieving 100 percent accuracy on the Unit Test.

6. Based on the content outline, LIST QUALITY CHARACTERISTICS DESIRABLE IN FABRIC SELECTION by completing Assignment Sheet 1 and by achieving 100 percent accuracy on the Unit Test.

7. Based on the content outline and Handout 3, COORDINATE PATTERNS WITH FABRICS by completing Job Sheet 2 and by achieving 100 percent accuracy on the Unit Test.

8. Based on the content outline, WORK WITH NAPPED FABRICS by achieving 100 percent accuracy on the Unit Test.

9. Based on the content outline and Handout 4, WORK WITH KNIT FABRICS by completing Job Sheet 3 and by achieving 100 percent accuracy on the Unit Test.

10. Based on the content outline and Transparency Master 3, WORK WITH EVEN AND UNEVEN PLAIDS by achieving 100 percent accuracy on the Unit Test.

11. Based on the content outline, IDENTIFY TECHNIQUES TO LAY OUT PATTERN ON PLAID FABRICS by completing Job Sheet 4 and by achieving 100 percent accuracy on the Unit Test.

12. Based on the content outline and Transparency Master 4, STRAIGHTEN WOVEN FABRICS by completing Job Sheet 5 and by achieving 100 percent accuracy on the Unit Test.

13. Based on the content outline, PRETREAT FABRICS, NOTIONS, AND TRIMS by completing Assignment Sheet 2 and by achieving 100 percent accuracy on the Unit Test.

14. Based on the content outline and Handout 5, LAY OUT AND CUT PATTERN PIECES CORRECTLY by completing Assignment Sheet 3 and Job Sheet 6 and by achieving 100 percent accuracy on the Unit Test.

FABRICS AND TEXTILES

UNIT I

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Make transparencies.

C. Provide students with Objective Sheet.

D. Discuss Unit and Specific Objectives.

E. Provide students with Information Sheet.

F. Discuss the Information Sheet.

(NOTE: Use transparencies to enhance the information as needed.)

G. Provide students with Handouts, Assignment and/or Job Sheets prior to the demonstration of the procedures. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

H. Integrate the following activities throughout the teaching of this unit:

    1. Introduce the unit by explaining the terminology provided on the Information Sheet.
    2. Discuss types of fabrics; have samples of fabrics available to show.
    3. Discuss fabric characteristics to look for when purchasing fabric.
    4. Provide students with patterns suitable for knit, napped, and plaid fabrics.
    5. Provide samples of even and uneven plaids.
    6. Demonstrate shrinking of fabric.
    7. Visit a fabric department and have sales clerk show fabric widths, information found on bolt ends, types of fabrics available, and pattern catalogs.
    8. Provide students with a proper layout of a pattern on a napped fabric and demonstrate proper cutting techniques.

I. Give test.

J. Evaluate test.

K. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Transparency Masters

   1. TM 1--Natural Fibers
   2. TM 2--Man-made Fibers
   3. TM 3--Even and Uneven Plaids
   4. TM 4--Straightening Grain

F. Handouts

   1. HO 1--Fibers and Their Properties
   2. HO 2--Burn Test
   3. HO 3--Pattern Envelope
   4. HO 4--Stretch Gauges from Pattern Backs
   5. HO 5--Mini Pattern

G. Assignment Sheets

   1. AS 1--Rate Quality Characteristics of Fabrics
   2. AS 2--Pretreat Fabric, Notions, and Trims
   3. AS 3--Lay Out Pattern Pieces Correctly

H. Answers to Assignment Sheets

I. Job Sheets

   1. JS 1--Identify Unknown Fibers with Burn Test
   2. JS 2--Coordinate Patterns with Fabric
   3. JS 3--Construct a T-shirt
   4. JS 4--Lay Out a Plaid Shirt
   5. JS 5--Straighten Fabric
   6. JS 6--Lay Out a Pattern

J. Unit Test

K. Answers to Unit Test

RESOURCES

(NOTE: Also see Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

A. Books and Curriculum Guides:

   1. Hughes, Mary G. Textile Fibers (catalog #HE-12-1). University of Missouri-Columbia: Instructional Materials Laboratory, July 1985.

   2. Pizzuto, J. J. Fabric Science. 5th ed. New York: Fairchild, 1987.

B. **Computer Program:**

1. Fiber Basics for Clothing (tutorial for Apple computers). Lake Zurich, IL: The Learning Seed, 1988.

C. **Audiovisual Materials:**

1. What Everyone Should Know About Fabrics (two color filmstrips/cassettes or VHS video). Career Aids, 20417 Nordhoff St., Dept. f45, Chatsworth, CA 91311 (818) 341-2535.
2. Let's Learn About Fabrics (filmstrip/cassette and teacher's guide). Career Aids, 20417 Nordhoff St., Dept. f45, Chatsworth, CA 91311 (818) 341-2535.
3. Introduction to Textiles (two color filmstrips/cassettes and program guide). Career Aids, 20417 Nordhoff St., Dept. f45, Chatsworth, CA 91311 (818) 341-2535.

FABRICS AND TEXTILES

UNIT I

INFORMATION SHEET

I. Terms and definitions

(Objective 1)

A. Blend--combination of at least two different fibers in one yarn (a blended fabric) or a fabric made from two or more different yarns (a combination fabric)

B. Chevron--"V" pattern formed by sewing plaid or striped fabric on the bias and matching at seams

C. Classic--traditional style that can stay in fashion for a very long time. Examples include the blazer jacket and blue jeans.

D. Directional cutting--cutting with the grain of the fabric; helps fabric maintain its original size and shape

E. Dye--substance added to produce or change the color

F. Even plaid--plaid where the stripe arrangement is the same in both lengthwise and crosswise directions and, when folded in any direction through center of plaid, results in halves forming a mirror image

G. Fad--strikingly different fashion that is popular for a short period of time, perhaps a few weeks or a season, but is soon forgotten. Examples include socks with individual toes and dog-leash belts.

H. Grain--direction of fabric threads. Yarns running parallel to selvage are on the lengthwise grain, and those running from selvage to selvage are on the crosswise grain. For perfect grain, the yarns must be at right angles to each other.

I. Interlock knit--fabric knit on a special machine to give it a smooth, reversible face. The stretchability of these knits is dependent upon the yarn used in their construction.

J. Lay out--positioning the pattern pieces on the fabric before cutting

K. Napped fabric--short surface fabrics having fibers that lay smoothly only when brushed in one direction

L. Notions--all the extras that it takes to make a garment or product: thread, zippers, hem tape, etc.

M. Pinked edge--notched edge finish made with pinking shears; used on fabrics that ravel easily

N. Pins--used to hold the pattern to the fabric while cutting and to hold the fabric pieces together during construction

O. Preshrink--to wash or dry clean fabric and notions before sewing them into a garment or product so that they will not shrink after they have been sewn

P. Quality characteristics--the traits of a fiber or fabric which make it desirable

Q. Shrink--to become smaller permanently. Water, steam, or dry cleaning may cause fabric or fibers in the fabric to contract or re-align.

R. Sizing--chemical and/or starch added to a fabric to give it stiffness and body. It can be used to make poor quality fabric appear better. Sizing usually comes out with the first washing.

S. Trims--decorative extras, such as lace, braid, piping, and decorative stitches added to create interest and design

T. Uneven plaid--a plaid with an unbalanced design in the crosswise or lengthwise direction, or both

II. Classification and general characteristics of fibers

(Objective 2; TM 1, 2)

A. Classification

1. Natural fibers and their sources
    a. Cotton from cotton plant
    b. Linen from flax plant
    c. Wool from sheep
    d. Silk from silkworms
2. Man-made or synthetic fibers
    a. Rayon
    b. Nylon
    c. Polyester
    d. Acetate
    e. Triacetate
    f. Acrylic
    g. Modacrylic
    h. Spandex
    i. Glass
    j. Metallic

B. General characteristics of fibers

1. Most natural fibers:
    a. Are absorbent
    b. Will shrink or lose shape
    c. Dry slowly
    d. Require pressing
    e. Collect soil but clean easily

2. Most man-made fibers (other than rayon):
    a. Will not shrink
    b. Are not absorbent and are quick drying
    c. Will accumulate static electricity
    d. Need little or no ironing; are sensitive to heat
    e. Will absorb body oil

III. Characteristics of specific fibers

(Objective 2; HO 1)

A. Natural fibers

1. **Cotton**--versatile, comfortable in summer, will mildew, wrinkles easily, does not build up static electricity, may be machine laundered, ignites easily, and burns freely
2. **Linen**--strong, durable; has natural luster and crispness; wrinkles easily; comfortable in summer; does not build up static electricity; may be washed, dried, and ironed at high temperatures; resistant to sunlight; ignites easily; burns freely
3. **Wool**--warm; resilient; sheds wrinkles and returns to its original shape after wearing; comfortable in winter; repels water, but eventually absorbs large amounts and is slow to dry; stretches when wet; shrinks easily, especially with heat and agitation; should be dry cleaned or washed in cool water and handled very carefully when wet; weakened by sunlight; resistant to mildew; damaged by moths unless mothproofed; does not burn easily, and tends to be self-extinguishing
4. **Silk**--strong, soft, luxurious, damaged by alkalis (soap) and chlorine bleach, weakened by sunlight and perspiration, expensive, burns slowly, and is sometimes self-extinguishing

B. Man-made fibers

1. **Rayon**--made from cotton linters, comfortable, silky feeling, easily damaged by heat, poor dimensional stability, weaker when wet, shrinks easily, weakened by sunlight, inexpensive, burns readily
2. **High wet modulus rayon**--moderate dry and wet strength, good dimensional stability, weakened by light, low resiliency, susceptible to mildew
3. **Acetate**--silk-like appearance, weak, weaker when wet, colors fade easily, sensitive to heat, builds up static electricity, economical, weakened by sunlight
4. **Triacetate**--can be permanently pleated, weak, not very absorbent, anti-static, resists sunlight better than acetate
5. **Nylon**--very strong, very lightweight, has excellent stretch and elastic recovery, absorbent, soil resistant
6. **Polyester**--excellent wrinkle resistance, very strong, oil stains easily, can be heat set, requires no ironing
7. **Acrylic**--soft, fluffy, lightweight, resembles wool, strong, may pill, will burn freely and melt
8. **Modacrylic**--soft and fur-like, flame resistant, very heat sensitive, can be shaped easily
9. **Spandex**--stretchable, lightweight, strong, resists perspiration and body oils, substitutes for rubber
10. **Glass**--brittle; strong; resists sunlight, fire, and mildew; totally nonabsorbent
11. **Metallics**--glitter, sensitive to heat, nonflammable, used for decoration and to make fabrics anti-static

IV. Fabric blends

(Objective 3)

A. Natural characteristics of fibers change in fabric blends and combination fabrics.

B. Blended fabrics are made by blending together two or more fibers before they are spun into yarns.

C. Combination fabrics are woven with yarns of one fiber in the lengthwise grain and yarns of another fiber in the crosswise grain.

(NOTE: Both blended and combination fabrics are commonly called blends.)

D. Fibers and fabrics are blended for economic, aesthetic, and functional reasons.

1. **Cotton** makes a blend more economical and gives it greater absorbency for increased comfort.
2. **Rayon** blends well with both natural and man-made fibers; it has high moisture absorbency and is easy to dye. Rayon is used in blends because it is inexpensive. Blending rayon with other fibers increases its versatility.
3. **Triacetate** is often blended with **cotton or rayon**.
4. **Nylon** is blended with other fibers to give strength and abrasion resistance to the fabric. (NOTE: When nylon is blended with wool, the cost is reduced.)
5. **Polyester** is blended with other fibers to produce "wash and wear" or "permanent press" fabrics and to reduce cost. When blended with cotton, polyester contributes durability, resistance to wrinkles and shrinkage, and ease of care.
6. **Modacrylic** fibers are often blended with other fibers such as cotton or acrylic in knitted garments where flame resistance is a special advantage.
7. **Wool** and **acrylic** fibers both produce warmth; acrylic fibers are blended with wool to reduce cost, shrinkage and attraction for moths.
8. **Wool, silk,** and **polyester** fibers give crease resistance, but polyester fibers cost less than wool or silk.
9. **Polyester** blended with wool or silk gives fabrics a crisper appearance.
10. **Nylon** and **silk** provide strength and resilience, but silk is too expensive for general use.
11. **Cotton, linen,** and **rayon** are used where absorbency is important; however, linen increases the cost.

V. Identifying unknown fibers

(Objective 3; HO 2; JS 1)

A. Chemical tests are accurate but not practical for the home or classroom.

B. Many fibers burn in distinctive ways and can be identified by the burn test.

1. Combination fabrics and blends cannot be identified by the burn test.
2. The burn test will destroy the fabric sample used.
    a. Ravel out a few threads from the fabric sample.
    b. Hold with tongs over a metal container and light with a match.

c. Observe the way the fiber reacts to the approach of the flame, how it burns in the flame, the smell when burning, whether it continues to burn when the source of the flame is removed, and what sort of residue is left behind.

d. Use **HO 2** to identify the fiber as closely as possible.

VI. Using information on textile labels

(Objective 4)

A. Labels are required on textile products to tell the consumer the fiber content and the care requirements of that fabric.

B. The Textile Fiber Products Identification Act passed in 1960 requires the following information on labels:

1. Fiber content (listed in order of predominance by weight)
2. Percentage of fiber content if fiber makes up five percent or more of product's weight
3. Manufacturer's name
4. Imported fiber's country of origin

C. The Rule on Care Labeling of Textile Wearing Apparel became effective in 1972 and requires that labels provide specific care instructions to maintain the product's quality. Labels must be attached as a permanent part of the garment and are also available with fabrics purchased for home sewing.

D. The Wood Products Labeling Act required by the Federal Trade Commission orders manufacturers to label the types of wool used in products and any other fibers which make up five percent or more of fabric content. It defines the following terms:

1. **Virgin wool**--wool which has never previously been made into fabric
2. **Reused wool**--fibers previously used in one product which are being reused in another
3. **Reprocessed wool**--fibers used previously in a woven or felted product or fabric, but never used by consumers

VII. Dye methods

(Objective 5)

A. The dying process utilized affects the performance of the fabric.

B. The four major methods used in commercial dyeing are **fiber, solution, yarn,** and **piece**.

1. In fiber dyeing, color is added to the fiber before the yarn is spun. Dye penetration is even. Fiber-dyed yarns are often made into tweeds and heathers, which are used for coatings and suitings.
2. In solution-dyeing, the color is added to the spinning solution of man-made fibers. Colorfastness to sunlight and washing is good. It looks similar to yarn-dyed fabric.
3. In yarn-dyeing, the color is added to the yarn before the fabric is made. Color penetration is good. Yarns can be used to make checks, plaids, and stripes.
4. In piece-dyeing, the color is added to the fabric after it is made. Usually one color is used. Dye may not penetrate as deeply into the fabric. This method is economical.

VIII. Quality characteristics of fabrics

(Objective 6; AS 1)

A. Fabric selected for sewing into a garment must:

1. Be suitable to the pattern
2. Be flattering for the person who will wear the garment
3. Perform according to expectations
4. Be of good quality

B. In a high-quality woven fabric:

1. **Threads** should be woven on perfect grain. The lengthwise threads should be running parallel to the selvages; crosswise threads should be running at right angles to the lengthwise threads.
   (NOTE: Some fabrics can be straightened by pulling the fabric piece at opposite corners. Be careful that the piece is not distorted when this is done.)
2. **Dye** coloring should be even and uniform. Look for fading or "crocking" along the line where the fabric has been folded onto the bolt. Check label for colorfastness and washing instructions.
   (NOTE: Madras plaids are intended to bleed and change with washing. Always wash them separately.)
3. **Blended** fabrics should give the advantage of the best qualities of both fibers. Check the label to determine the fibers used and the percentage of each fiber. A cotton/polyester blend should be colorfast, crease-resistant, shrink-resistant, permanent press, and comfortable. A wool/acrylic blend should be moth-resistant, wrinkle-resistant, washable, and comfortable.
4. **Sizing** should not be excessive. Sizing is added to yarns during the knitting stage to make them easier to handle. Excess sizing is usually washed off by the manufacturer. If the fabric still seems to have a lot of sizing (if a white powder comes off on your hands when you rub the fabric), the fabric may be of poor quality. When the sizing is washed out, the fabric may be very limp.

C. In a high-quality knitted fabric:

1. The knitting should be tight so that the fabric has elastic recovery. If the fabric does not return to its original shape, the garment will stretch or sag during wearing and maintenance.
2. Dye coloring should be even and uniform. Check for fading and crocking along foldlines.

D. Fabric finishes add good characteristics to fabrics.

1. Flame-resistance: treatment to prevent the spread of flame once the source is removed; especially used on fabrics intended for children's sleepwear
2. Mercerization: for cotton and linen to add strength, luster, and the ability to accept dye
3. Mildew-resistance: helps fabrics resist mildew and other types of mold
4. Mothproofing: helps fabric resist attack by moths
5. Permanent press: makes fabric shed wrinkles, retain creases and pleats, and come out of machine washing and drying without needing ironing

6. Pre-shrinking: prewashing or treatment to take the shrink out of the fabric before it is put on the bolt. Maximum remaining shrinkage is usually indicated on the label.
7. Sanforized™: process which leaves no more than one percent shrinkage in fabric
8. Waterproofing: finish that closes the pores of the fabric and makes it impervious to water
9. Water repellency: makes fabric resist penetration by water. Fabric remains porous and can still breathe.
10. Wrinkle resistance: makes fabric resist wrinkling and recover from wrinkles caused by normal wear

IX. Fabric/pattern suitability

(Objective 7; HO 3; JS 2)

A. The pattern envelope back has a section on suggested fabrics. These fabrics will have the proper weight and drapeability for the look intended by the designer.

B. Note especially any restrictions such as "not suitable for stripes or obvious diagonals".

C. Other fabrics will also work if they are similar to those suggested.

D. Study the design lines of the garment picture on the front of the pattern envelope. Notice the lines and general silhouette of the garment. Determine whether the fullness is accomplished by the cut of the pattern pieces (as an A-line skirt) or by using gathers and pleats. Notice whether the garment drapes softly or stands stiffly out from the body.

E. Consider using stripes, plaids, border prints, and one-way designs to add interest to your garment. Be sure that the size of the design is appropriate to the wearer. If the pattern is pictured in a stripe, plaid, or other interesting fabric, the pattern is appropriate for use with that treatment. If not, the pattern may still be appropriate, but check carefully that you will be able to match stripes, plaids, etc., and that there are no darts or pleats that will interfere with the pattern of the fabric.

(NOTE: Extra fabric may be required if stripes, plaids, or interesting prints are used.)

F. Choose interfacing, lining, underlining, and interlining fabrics that are compatible to your fashion fabric. These shaping materials contribute to the look of the finished garment, add body to fashion detail areas, prevent sagging, give greater crease resistance to all fashions, and increase the life of the garment.

G. Napped fabrics (those with one-way surface detail) add interest to a garment. Examples: velvet, velveteen, corduroy, and terry

(NOTE: These fabrics may also require extra fabric. Consult the "fabric with nap" yardage on the envelope.)

X. Working with napped fabrics

(Objective 8)

A. Fabrics with nap are woven or knitted with an extra strand of yarn in one or the other direction, or both. The extra strand is used to make loops which stand out from the base of the fabric and create a texture. These loops may or may not be cut.

B. Napped fabrics have direction--they do not look the same along lengthwise grain when viewed from the top down as when viewed from the bottom up. Therefore, all pieces of a garment made with napped fabrics must be cut with the top of the piece headed the same direction.

C. Most patterns give yardage for use with napped fabrics. If your pattern does not, lay the pattern pieces out on a cutting board and measure for yardage needed.

D. To determine the proper direction of the nap, run your hand over the fabric and feel the difference. The fabric will feel smooth running down and rough running upward. The nap direction affects the color, texture, and wearability of a fabric. When the nap runs up, the color is deeper and richer and the textured surface more visible. For durability and wear, the nap should run down the garment. This is the more common method of cutting a napped garment.

E. Lay the pattern out on the napped fabric, carefully watch grainlines and nap direction of pieces. If there is danger that the under layer will be cut off grain (because you can't see it), cut out the pieces one layer at a time. (Be sure to turn the pattern piece over when cutting the second piece.) If pin holes show in the fabric (as with velvets and velveteens), put pins only in the seam allowance. Never use a crosswise fold with napped fabric.

F. Before sewing the garment, check the size of the needle, length of the stitch, and the pressure on the presser foot on a scrap of the fabric. In some napped fabrics, stitching cannot be ripped out because needle holes will show. Some napped fabrics, such as camel's hair and cashmere, must be sewn with decreased pressure on the presser foot.

G. Always sew in the direction of the nap.

H. Care must be taken when pressing a napped fabric so that the pile is not crushed. Use a needle board or a terry towel and place the fabric face down. Press with very little pressure on the wrong side only.

I. For any fabric with a one-way design, use the cutting layout for napped fabrics.

XI. Working with knits

(Objective 9; HO 4; JS 3)

A. Knit fabrics are available in every weight, texture, color, and fiber. They come in solid colors, stripes, flowered prints, and textured tweeds.

B. The stretchability of a knit fabric is determined by the way the fabric is knitted and the fiber used in the fabric.

1. Swimming suit and dance-wear fabrics are double-knitted from a spandex-blend fabric with excellent stretch and elastic recovery.
2. Sweater fabrics are single knits made from a wide variety of fibers. The amount of stretch depends largely on how tightly the fabric is knitted.
3. Some knitted fabrics are very stable and can be handled like a woven fabric.
4. Some knitted fabrics have stretch only in one direction; others stretch in both directions.

C. To determine whether a specific fabric will work with your pattern, use the "stretch gauge" on the pattern envelope.

D. Some common knit constructions are:

1. **Single knit:** Jersey or plain knit. Front side is smooth and has vertical wales (up and down lines). The back side is pebbly and has horizontal lines. Susceptible to snagging and running.
2. **Rib knit:** Vertical ribs alternating with valleys in a regular pattern (2/2 or 1/1). Back and front are the same. Has good horizontal stretch and recovery. Used for cuffs, necklines, and waistbands.
3. **Purl knit:** Horizontal lines alternating with horizontal valleys. Back and front are the same. Has more vertical stretch.
4. **Interlock or double knits:** Made from two sets of yarns knitted together. The front and back are like a jersey knit. The "back" is in the center and does not show. Usually has less stretch than a jersey or rib knit. Resists snagging and running better than single knits.
5. **Jacquard knit:** Interlock knits with intricate patterns and/or textures
6. **Tricot knits:** Soft, drapable, smooth appearance. Used for swim-wear and dance-wear. Does not stretch unless a stretch yarn (such as spandex) is used. Does not run.
7. **Raschel knit:** A more complicated version of tricot method. Used for lacy, textured knit and open work on sweaters and T-shirts, as well as lace fabric yardage.

E. Preshrink knits before cutting. If the crease does not come out with washing and pressing, refold the fabric, putting the crease in the center; cut around it.

F. Cut with sharp shears. Mark with tailor's chalk or tailor's tacks. Snip notches, dots, and ends of foldlines on seams that will not be altered.

G. Most seams in stretch knits must give when the garment is stretched so they do not break. Use polyester or cotton-wrapped polyester thread and a regular straight stitch, a narrow stretch stitch, or a small zigzag stitch. Or use a serger, which will overcast, trim, and sew with a stretch stitch--all in one operation.

H. Some seams should not stretch--shoulder seams, waistlines, neck edges, etc. In these areas, use seam binding or twill tape over the seam to stabilize them.

I. Sew with a ball-point needle in an appropriate size for the fabric.

J. Some fabrics have a tendency to curl. These can be sprayed with spray starch or hair spray and finger-pressed flat.

K. When sewing open weave and loopy fabrics like terry cloth, put tape on the presser foot to prevent the toes from catching in the holes or loops.

L. Special notions are available for knits. Stretch interfacings come in many weights and degrees of stretch. Also available are lightweight nylon zippers, nonroll elastic, and fusible web for invisible hemming.

M. Before hemming a knit garment, it should be allowed to hang for several hours or overnight so the fabric can relax.

N. A double needle can be used to make a nice, neat hem and also to finish around the neckline and armholes.

XII. Working with plaids

(Objective 10; TM 3)

A. Plaid fabrics add interest to any garment.

B. Both woven and knitted fabrics are made in plaids.

C. Select a pattern to use with a plaid fabric.

1. Select a pattern with straight lines and little detailing. Let the plaid fabric tell the story.
2. Darts create matching difficulties. Try to avoid them.

D. Buying plaid fabric

1. Select a plaid in scale with both the garment and the person who will wear it.
2. Check the grain lines of the fabric to see whether the plaids are on grain.
    a. If the plaid is slightly off grain, plan to match the plaid lines. These are more noticeable than the grain lines.
    b. If the plaid is extremely off grain, do not buy it.
    c. Madras plaids are usually printed off grain. The seams will not match.
3. Always buy extra fabric for matching plaids.
    a. The pattern envelope may give yardage for napped fabric. Use this as a guide.
    b. More fabric will be needed for uneven plaids than for even plaids.

E. Plan the layout of the garment.

1. Find the dominant stripe in the plaid to use in strategic places. Put it down the center front and center back, down the outside line of the sleeve, and at the hemline.
2. Pockets and other small detail areas should match or be cut on the bias.
3. Plaid lines in a jacket should match the lines in the skirt or pants.
4. Make all fitting adjustments to the pattern before cutting out the fabric.
5. Decide on the final length and use a plaid line to mark the hemline.

F. Even plaids

1. The stripe arrangement is balanced both crosswise and lengthwise.
2. When folded in any direction through the center of the square repeat, the halves form a mirror image.
3. Even plaids are easier to work with than uneven plaids.

G. Uneven plaids

1. Design that is unbalanced lengthwise, crosswise, or both
2. Much more difficult to work with
3. Must be matched, but will only match in one direction

XIII. Laying out pattern on plaid fabrics

(Objective 11; JS 4)

A. Laying out an even plaid

1. Check fabric for nap or color shading.
2. Sometimes the layout on the pattern for napped fabric works very well.
3. Place the pattern pieces so that the notches and symbols along the seamlines are matched at the center of the front and back.
4. Match the seam line, not the cutting line.
5. Match the front armhole and the front bodice at the notch. The sleeve over the cap will not match.
6. Match front and back from bottom up. If there is a dart, plaid will not match above the dart.
7. Place the dominant line in areas of design such as collar, cuffs, yokes, pockets, etc., or cut these pieces on the bias.
   (NOTE: When working with pieces cut on the bias, add a lightweight interfacing cut on the straight grain to stabilize and prevent stretch.)

B. Laying out an uneven plaid

1. Use the layout on the pattern envelope for napped fabrics.
2. Cut most pieces through a single layer of fabric only. Be sure to reverse pattern pieces when cutting the second piece.
3. Pick the dominant plaid line for the center front and center back.
4. Match the plaid line for the front either horizontally or vertically.
5. Check that side seams match.
6. Uneven plaids can be cut on the bias to form chevrons in the center front and center back of a skirt.
   a. Be sure to allow skirt to hang before hemming so fabric can relax and any stretch can fall out.
   b. Always press bias-cut fabric along the true straight grain lines.
   c. Side seams will not match unless one half of the skirt is cut with the wrong side of the fabric out. Do not do this unless there is no difference between the right and wrong sides of the fabric. Check carefully.

XIV. Straightening fabric grain

(Objective 12; TM 4; JS 5)

A. If the grain of the fabric is not exactly perpendicular, the garment will not hang smoothly and fit properly.

B. Straighten the end on a woven fabric.

1. Pulling a thread is the most accurate and the most time-consuming method.
    a. Snip the selvage.
    b. Pull out a crosswise thread until the fabric puckers.
    c. Cut along the line created.
    d. Continue pulling and cutting across the fabric.
2. Tearing across the fabric is faster, but doesn't always work.
    a. Snip the selvage.
    b. Hold the fabric in both hands on opposite sides of the snip and pull gently.
    c. Some fabrics will not tear at all. Stop. Use the pull-a-thread method above.
    d. If the tear line "feathers", stop. Sometimes tearing will cause the lengthwise threads to run, making little lines all along the edge. Use the pull-a-thread method above.
    e. When you get to the center fold of the fabric, be careful. Some fabrics will tear down the lengthwise grain at this point. Stop.
    f. After tearing, allow the fabric to rest for several hours before using it. Then press the torn edge to flatten it.

C. Straighten the end on a knit fabric.

1. Cut along a crosswise line of loops.
2. If loops are hard to follow, mark the line with chalk and then cut.
3. To open a tubular knit, mark along a rib with chalk and then cut.

D. Check the grain.

1. Fold the fabric in half lengthwise and lay on a cutting board or table top.
2. Check the ends. If they meet, the fabric is on grain. If one end is slanted, the grain needs to be straightened.

E. Straighten the grain on woven fabrics.

1. Pin selvages together and lightly dampen the underside. Press, moving iron only in the lengthwise and crosswise directions. Never move iron at an angle. Steam out puckers and let fabric air dry.
2. Pull fabric from opposite corners.

F. On knit fabrics, the grain cannot be straightened. Steaming may help, but the fabric will regain its original shape when washed or dry cleaned.

G. Permanent press fabrics cannot be straightened. When using permanent press fabrics, match the selvages and do not worry about the grain.

H. Some fabrics are printed off grain. Avoid these when possible. If you do use one, follow the line of the print rather the line of the true grain.

XV. Pretreating fabric, notions, and trims

(Objective 13; AS 2)

A. Fabrics

1. Most modern fabrics are "ready for the needle" and require no preshrinking. Read the bolt label to be sure. Look for labels that say "preshrunk," "Sanforized™," or, for wools, "sponged."
2. To preshrink washable fabrics:
    a. First clip the selvages every 3" to 4" so they will not draw up.
    b. Wash and dry the fabrics in the same way that the garment will be washed and dried.
    c. Cottons and linens can be immersed in lukewarm water for an hour or so.
    d. Fabric may be only partially dried and then pressed lightly on the wrong side, pressing out the foldline.
3. To preshrink woolen fabrics:
    a. At home
        (1) Wet a sheet or sheet blanket in lukewarm water in the washer and spin dry. Lay sheet flat on the floor.
        (2) Fold wool fabric with right sides together and lay flat on top of sheet.
        (3) Gently fold into sheet and leave folded for several hours.
        (4) Unfold and let wool air dry.
        (5) Gently press on wrong side with press cloth, pressing out center fold.
    b. Take fabric to a reputable dry cleaner and ask them to preshrink the fabric.

B. Interfacings and notions

1. Most notions and trims contain polyester and do not need preshrinking before use.
2. Any tapes or zippers made from cotton or linen should be preshrunk before use. Soak in hot water and press dry.
3. Belting should be preshrunk. Dampen slightly and press.
4. When in doubt, preshrink.

XVI. Laying out and cutting pattern pieces

(Objective 14; HO 5; AS 3; JS 6)

A. Preparation

1. Remove layout information sheets from the envelope and identify the layout you will use. Use the layout for the size you are cutting, the width of the fabric being used, and the view you are making. Choose the layout for napped fabric if you are cutting fabric with a one-way design, pattern, or weave. Circle the appropriate layout with a felt pen.
2. Remove all the pattern pieces from the envelope. Use a paper scissors to separate out the pieces needed for the garment you are making. Put the others back into the envelope.
3. Use a paper scissors to trim the excess tissue away from the cutting line of pattern pieces so that the fabric shears are **not** used on paper.
(NOTE: It is also possible to cut the fabric and trim the excess tissue in one operation. This is faster but will dull the shears.)
4. Press each pattern piece with a warm, **dry** iron. Do not use steam.

5. Compare your measurements to those listed on the envelope and make any alterations, including length.
6. Have all fabrics and notions preshrunk.

B. Lay out the fabric.

1. Lay out fabric on a large table or on the floor. Use a cutting board marked in inches in both directions, if you have one.
2. Consider the type of fabric. Plaids or florals must be matched; napped and pile fabrics must be laid all in one direction. Some brocades, satins, and twill weaves may have shading. If you have any doubt, lay all pattern pieces in one direction.
3. If the layout calls for a double thickness of fabric, fold right sides together and pin selvages. Napped fabrics are cut with the wrong sides together to prevent slipping and shifting while cutting, or are cut from a single layer.
4. If the layout calls for a single thickness of fabric, lay the fabric right side up and the pattern printed right side up.
5. If right and left sides are cut separately, the pattern piece must be turned face down to cut the second piece. Otherwise, you will have two right or left skirt, bodice, or sleeve pieces.
6. Some layouts require that the fabric be folded on the crosswise grain. The lengthwise grain arrow on the pattern pieces must still be placed parallel to the selvages. Do not use a crosswise fold with napped fabrics.

C. Lay out the pattern pieces.

1. Lay out all pattern pieces before cutting.
2. All pattern pieces are marked with an arrow showing the lengthwise grain. This arrow must be parallel to the selvage. To be sure that the pattern piece is straight on the fabric, measure from the arrow to the selvage and then pin the pattern tissue in place.
3. Edges to be placed on the fold of the fabric must be exactly on the lengthwise fold. Pin in place. This fold will often be the center front or center back of the garment.
4. On knit fabrics, pin securely within the seam allowances using silk or ball-point pins.
5. Recheck that all necessary pattern pieces have been used and that all are laid correctly.

D. Cut out fabric.

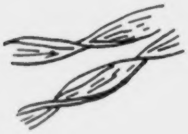
1. Use a 6" to 7" dressmaker shears.
   (NOTE: Do not use pinking shears to cut out fabric. Use them later to finish raw edges where appropriate.)
2. Cut with long, even strokes, keeping the blade's back resting on the working surface.
3. Keep the fabric lying flat on the cutting surface by placing one hand flat on the tissue and fabric as you cut.
4. Cut with the grainline exactly on the marked cutting line.
5. Cut notches outward to prevent weakening in the seams. Cut double and triple notches in one continuous strip across the top of the notches.
   (NOTE: It is also possible to cut clips into the seam allowance rather than cut out notches. This technique is faster but less accurate.)
6. Cut out the entire garment at one time.
7. Transfer markings to pattern pieces.
8. Cut out interfacing, lining, and underlining.

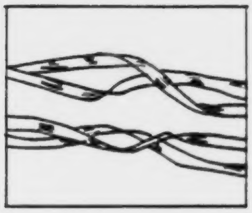
TM 1

Natural Fibers

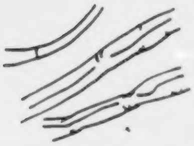
A. Cellulosic fibers

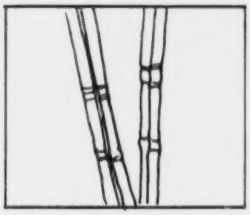
1. cotton





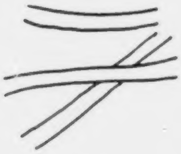
2. linen

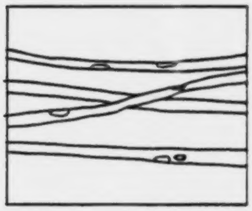




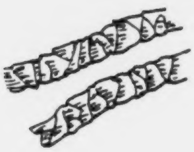
B. Protein fibers

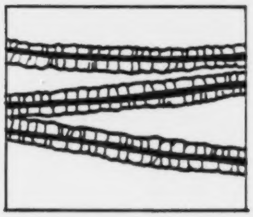
1. silk





2. wool





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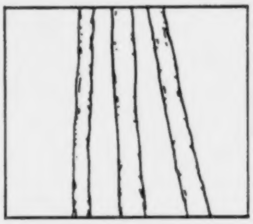
TM 2

Man-made Fibers



A. Cellulosic fibers

  1. rayon

    a. high wet modulus rayon

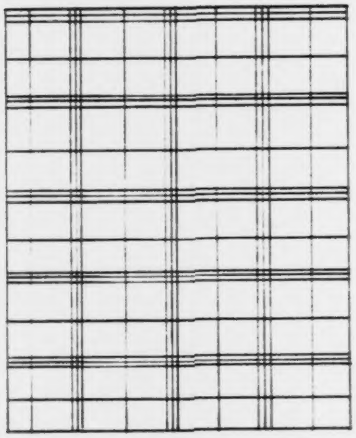
    b. viscose rayon

B. Synthetic fibers

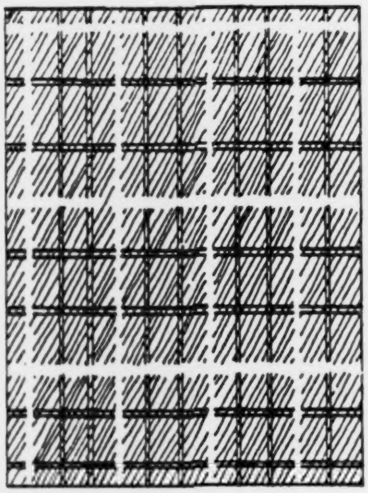
  1. nylon
  2. polyester
  3. acrylic fibers
  4. modacrylic fibers

TM 3

Even and Uneven Plaids



Even

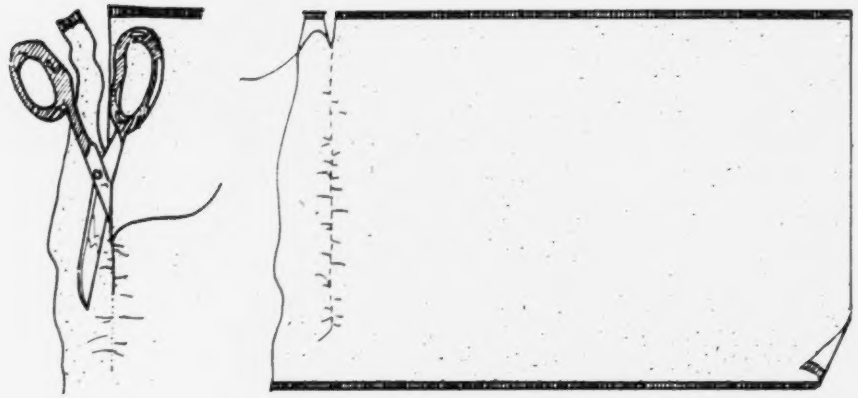


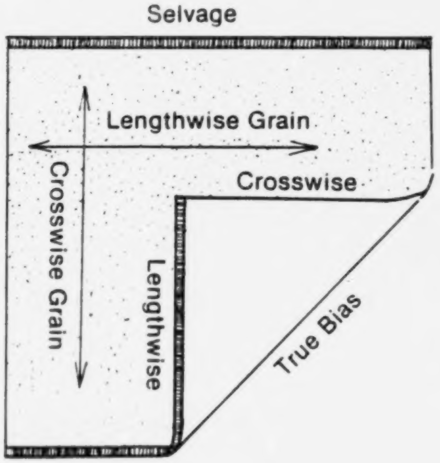
Uneven

37

TM 4

Straightening Grain




Selvage
Lengthwise Grain
Crosswise
Crosswise Grain
Lengthwise
True Bias

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FABRICS AND TEXTILES

UNIT I

HANDOUT 1--FIBERS AND THEIR PROPERTIES

<table>
<tr><th>Fabric (and source), uses, and care</th><th>Strong</th><th>Absorbent</th><th>Draws heat from body</th><th>Wrinkles</th><th>Reaction to dye</th><th>Shrinking</th><th>How weakened</th><th>Other char.</th></tr>
<tr><td>Cotton (from seed pod of cotton plant)</td><td>Yes, even when wet</td><td>Yes</td><td>Yes</td><td>Yes</td><td>Takes well</td><td>Yes, unless treated</td><td>Mildew, sunlight</td><td></td></tr>
<tr><td colspan="9">Typical fabrics and uses: Versatile fabrics in many weights and textures. Used for summer wear, season-spanning garments, work clothes. Examples: Corduroy, denim, poplin, terry, organdy, seersucker.
Care: Most cottons can be laundered--colorfast ones in hot water; others in warm or cold water. Tumble-dry at hot setting. Chlorine bleach can be used if care instructions permit. Iron while damp.</td></tr>
<tr><td>Linen (from flax plant)</td><td>Yes</td><td>Yes</td><td>Yes</td><td>Yes, unless treated</td><td>Poor affinity</td><td>Somewhat</td><td>Mildew</td><td>Can stretch</td></tr>
<tr><td colspan="9">Typical fabrics and uses: Fabrics usually have coarse texture and natural luster. Weave weights vary from very light to heavy. Used for spring and summer wear, as well as many household items.
Care: Usually dry cleaned to retain the crisp finish. Can be washed if softness is preferred. Usually shrinks when washed.</td></tr>
<tr><td>Silk (from cocoons of silkworms)</td><td>Yes</td><td>Yes</td><td>No</td><td>Resistant</td><td>Good affinity, but can bleed</td><td></td><td>Sunlight and perspiration</td><td>Resists mildew, moths</td></tr>
<tr><td colspan="9">Typical fabrics and uses: Luxurious, lustrous fabrics in many weights. Used for dresses, suits, blouses, and linings. Examples: Brocade, chiffon, crepe, satin, tweed, jersey.
Care: Usually dry cleaned. If washable, usually done by hand in mild suds. Avoid chlorine bleach. Iron at low temperature setting.</td></tr>
<tr><td>Wool (from fleece of sheep)</td><td>No</td><td>Very</td><td>No</td><td>Wrinkles fall out</td><td>Good affinity</td><td>Yes, unless treated</td><td></td><td>Needs mothproofing</td></tr>
</table>

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Fabric (and source), uses, and care	**Strong**	**Absorbent**	**Draws heat from body**	**Wrinkles**	**Reaction to dye**	**Shrinking**	**How weakened**	**Other char.**
Typical fabrics and uses: Fabrics of many weights, textures, constructions. Used for sweaters, dresses, suits, and coats. Examples: Crepe, flannel, fleece, gabardine, melton, tweed, jersey.								
Care: Usually dry cleaned. Many sweaters can be washed in tepid water and mild suds; do not wring. Do not use chlorine bleach. Some wools can be machine washed; follow instructions.								
Acetate	No	Moderately	No	Yes	Dyes well, but subject to fading	Resistant to shrinking, stretching, and moths		Gathers static electricity
Typical fabrics and uses: Luxurious, silk-like fabrics with deep luster and excellent draping qualities. Used for lingerie, dresses, blouses, linings. Examples: Brocade, crepe, faille, satin, taffeta, lace, jersey, tricot. Care: Usually dry cleaned. If washable, can be done by hand or on gentle cycle of machine. If tumble-dried, use low setting. Iron all acetates at synthetic setting; they melt at high heat.								
Acrylic	Yes	Not very	No	Resistant	Good affinity		Heat-sensitive	Resists mildew, moths. Can pill. Gathers static.
Typical fabrics and uses: Chiefly soft or fluffy fabrics, often with pile construction. Often blended with other fibers. Used for sweaters, dresses and outerwear. Examples: Fake fur, fleece, double knit. Care: Some acrylics can by dry cleaned, but laundering is usually recommended. Can be machine-washed (warm setting) and tumble-dried. Use fabric softener to reduce static electricity. Often needs no ironing if removed from dryer before cycle ends.								
Glass	Yes	No		Resistant	Low affinity		Abrasion	Undamaged by many chemicals, sunlight
Typical fabrics and uses: Fabric types from sheer and lightweight to coarse and heavy. Used principally for curtains, draperies, and upholstery. Care: Hand-laundering usually recommended. Chlorine bleach can be used for white fabrics. Ironing is not usually necessary.								

Fabric (and source), uses, and care	**Strong**	**Absorbent**	**Draws heat from body**	**Wrinkles**	**Reaction to dye**	**Shrinking**	**How weakened**	**Other char.**
Metallic	No	No					Tarnishes unless coated with plastic film	Heat sensitive
Typical fabrics and uses: First made into yarns; these are usually coated with plastic, polyester, or acetate film and made into glittery fabrics. Care: Launder or dry clean according to care instructions. Do not use high temperature for either washing or ironing.								
Modacrylic		Low	No	Resistant			Very heat-sensitive	Resists moths, mildew; nonallergenic; dries quickly; flame-resistant
Typical fabrics and uses: Chiefly deep-pile structures. Used for coats, plush toys, carpets, and wigs. Example: Fake fur. Care: Deep-pile coats should be dry cleaned. For fabrics labeled washable, follow care instructions. Avoid ironing; modacrylics melt at relatively low temperatures.								
Nylon	Yes	Low	No	Resists wrinkling, soil, mildew, and moths				Tends to pill; gathers static
Typical fabrics and uses: Wide range of fabric textures and weights. Often blended with other fibers. Used for lingerie, linings, swimsuits, blouses, and dresses. Examples: Ciré, fake fur, satin, jersey. Care: Can be washed by hand or machine in warm water; use gentle machine cycle. Use fabric softener to reduce static electricity. Tumble- or drip-dry. Iron at low temperature.								
Olefin		No	No		Difficult to dye		Heat-sensitive	Nonallergenic
Typical fabrics and uses: Fabrics are usually bulky but lightweight, with a wool-like hand. Used for outerwear filling and upholstery. Care: Machine wash, lukewarm water; use fabric softener in final rinse. Tumble-dry at lowest setting. Iron at lowest temperature setting, or not at all.								

<table>
<tr><th>Fabric (and source), uses, and care</th><th>Strong</th><th>Absorbent</th><th>Draws heat from body</th><th>Wrinkles</th><th>Reaction to dye</th><th>Shrinking</th><th>How weakened</th><th>Other char.</th></tr>
<tr><td>Polyester</td><td>Yes</td><td>Low</td><td>No</td><td>Resists wrinkling, stretching, moths, mildew</td><td></td><td>Resistant</td><td></td><td>Retains heat-set pleats. Gathers static</td></tr>
<tr><td colspan="9">Typical fabrics and uses: Wide variety of fabrics in many weights and constructions. Used for dresses, suits, sportswear, lingerie, linings, curtains, thread, filling for pillows. Examples: Crepe, double knit, lining.
Care: Most polyesters are washable in warm water by hand or machine. Tumble- or drip-dry. Use fabric softener to reduce static electricity. May need little or no ironing; use moderate setting for touch-ups.</td></tr>
<tr><td>Rayon</td><td>No</td><td>Yes</td><td>No</td><td>Wrinkles or stretches unless treated</td><td>Good affinity</td><td>Shrinks unless treated</td><td></td><td></td></tr>
<tr><td colspan="9">Typical fabrics and uses: Many fabric weights, textures silky to coarse. Used for dresses, blouses, suits, linings, draperies. Examples: Butcher linen, matte jersey.
Care: Many rayons must be dry cleaned. Some are washable in warm water, gentle machine cycle. Chlorine bleach can be used. Iron at moderate setting.</td></tr>
<tr><td>Spandex</td><td>Yes</td><td>No</td><td></td><td></td><td></td><td></td><td>May yellow in light</td><td>Great elasticity; lightweight</td></tr>
<tr><td colspan="9">Typical fabrics and uses: Flexible, lightweight fabrics. Often used with another fiber. Used for swim-wear, ski pants, foundations, elastic.
Care: Wash by hand or by machine using gentle cycle. Avoid chlorine bleach. Drip- or tumble-dry. Iron at low temperature.</td></tr>
<tr><td>Triacetate</td><td>No</td><td></td><td></td><td>Resistant</td><td>Good affinity</td><td>Resistant</td><td></td><td>Retains heat-set pleats</td></tr>
<tr><td colspan="9">Typical fabrics and uses: Lightweight fabrics. Used for sportswear and skirts where pleat retention is desirable. Examples: Sharkskin, tricot.
Care: Hand or machine wash in warm water. Drip-dry pleated garments; tumble-dry other styles. Ironing usually required.</td></tr>
</table>

FABRICS AND TEXTILES

UNIT I

HANDOUT 2--BURN TEST

Natural fibers					
	Cotton and Linen	**Rayon**	**Acetate**	**Wool**	**Silk**
Near flame	Scorches; ignites easily	Scorches; ignites quickly	Fuses away from flame; turns black	Curls away from flame	Curls away from flame
In flame	Burns quickly; yellow flame	Burns quickly; yellow flame	Flames rapidly; fabric sputters, melts; drips like burning tar	Small, slow, flickering flame; sizzles and curls	Burns; melts slowly; sputters; may burn with glow
Removed from flame	Continues to burn rapidly; has afterglow	Continues to burn; afterglow	Continues to burn and melt	Self-extinguishing	Usually self-extinguishing
Smell	Like burning paper	Like burning paper	Like vinegar	Like burning feathers or hair	Like burning feathers or hair, but less pronounced than wool
Residue	Light, feathery, grayish; light to charcoal gray color	Light, gray, fluffy; small amount	Brittle, hard, irregular, black beads	Crisp, dark ash; irregular shape; brittle	Round, crisp, shiny, black beads; easily crushed; screen-like skeleton of original shape

Synthetic fibers			
	Polyester	**Acrylic**	**Nylon**
Near flame	Fuses and shrinks away from flame	Fuses and shrinks away from flame	Fuses and shrinks away from flame
In flame	Burns slowly with melting	Flames rapidly; fabric puckers, sputters, melts	Burns slowly with melting
Removed from flame	Self-extinguishing	Continues to burn and melt	Self-extinguishing
Smell	Slightly sweet; may be like burning tar	Faintly like burning meat	Somewhat like celery
Residue	Hard, round, brittle, black or brown bead	Brittle, hard, irregular, black bead	Hard, round, tough, gray or tan bead

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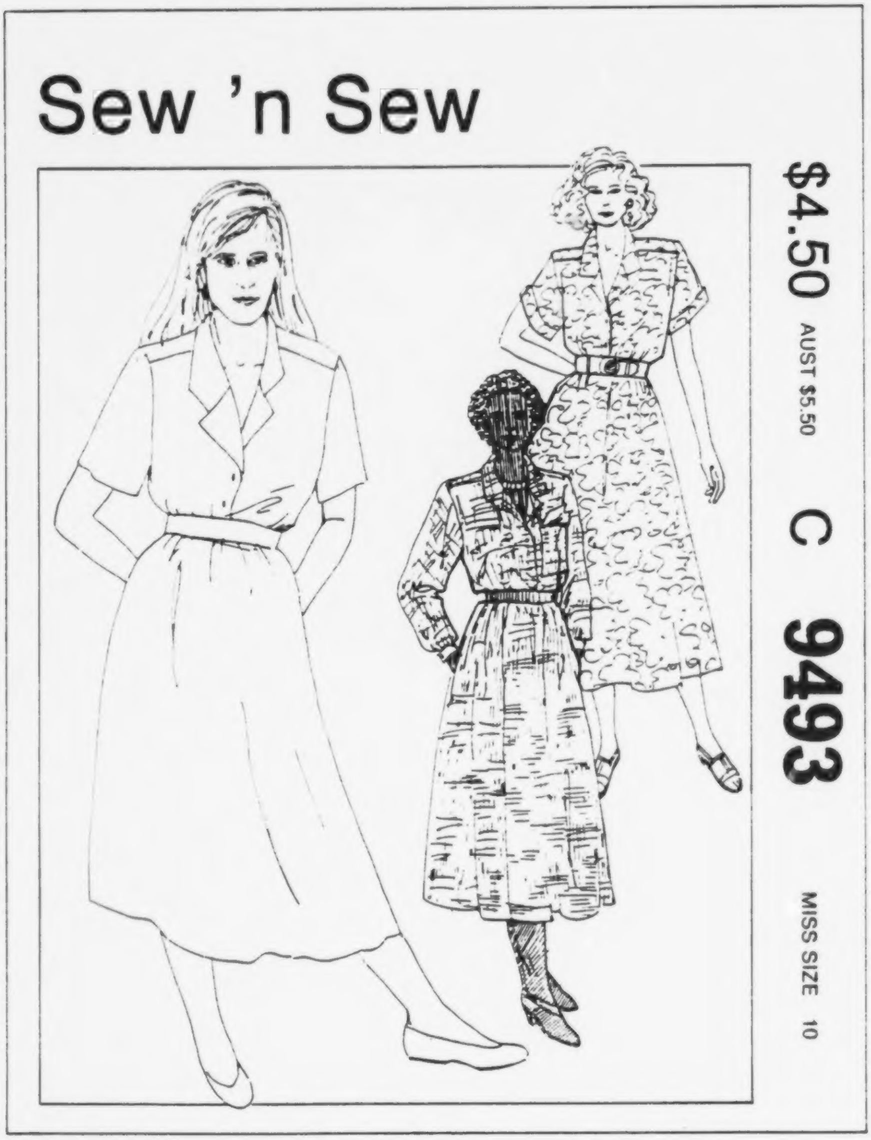
FABRICS AND TEXTILES

UNIT I

HANDOUT 3--PATTERN ENVELOPE



Sew 'n Sew

$4.50 AUST $5.50 C 9493 MISS SIZE 10

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Pattern Back

9493 MISSES' DRESS: Pullover dress back pleats, self-lined back yoke with forward shoulder seams, shoulder pads, notched collar, buttoned front opening, patch packets and elasticized waistline; full, bias shirt has pockets in side seams. View A has short sleeves. View B has long sleeves pleated to buttoned cuffs. Both views: Top-stitched trim and machine stitched hems. Purchased belt

BODY MEASUREMENTS

Size	8	10	12	14	16	18	20	22	
Bust	31-1/2	32-1/2	34	36	38	40	42	44	Ins
Waist	24	25	26-1/2	28	30	32	34	37	"
Hip	22-1/2	34-1/2	36	38	40	42	44	46	"
Back waist length	15-3/4	16	16-1/4	16-1/2	16-3/4	17	17-1/4	17-3/8	"

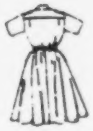
NOTE: For suggested interfacings, see listings on SEWING GUIDE inside pattern envelope
Sizes 20 and 22 and in the same envelope.

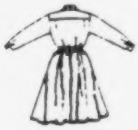
SIZES	8	10	12	14	16	18	20	22	
VIEW A - DRESS (Skirt Cut Bias)									
35/36"*	4-7/8	5	5-1/8	5-3/8	5-1/2	5-7/8	6	6-1/8	Yds.
44/45"*	4	4-1/8	4-1/4	4-3/8	4-3/8	4-1/2	4-3/4	4-7/8	"
58/60"*	3	3-1/8	3-1/8	3-1/4	3-3/8	3-1/2	3-1/8	3-3/4	"
Interfacing - 21" thru 25", 3/4 yd.									
VIEW B - DRESS (Skirt Cut Bias)									
35/36"*	5-3/8	5-3/8	5-1/2	5-3/4	5-7/8	6-1/8	6-1/4	6-3/8	Yds
44/45"*	4-1/8	4-1/4	4-5/8	4-5/8	4-7/8	4-7/8	5	5-1/4	"
58/60"*	3-1/2	3-1/2	3-5/8	3-3/4	3-3/4	3-7/8	4	4-1/8	"
Interfacing - 21" thru 25", 3/4 yd.									
Bottom width									
All views	118-1/2	119-1/2	121	123	125	127	139	131	Ins.
Garment Measurements									
Finished back length from normal neckline									
All Views	45-1/2	46	46-1/2	47	47-1/2	48	48-1/2	49	Ins.

*With Nap **Without Nap ***With or Without Nap Use *With Nap yardages and layouts for pile, shaded or one-way design fabrics. Additional fabric may be needed to match stripes, plaids, one-way designs.

SUGGESTED FABRICS: Cotton • Cotton Blends • Seersucker • Chambray • Lightweight Denim • Cord • Madras • Lightweight Poplin • Challis • Lightweight Poplin. NOTE: Not Suitable for Diagonals.
NOTIONS: Thread; 1-1/8 Yds. (1.05) of 3/8" Wide Elastic; 1-7/8 Yds. of Single Fold Bias Tape (for casing); 1" Thick Covered Shoulder Pads; Purchased Belt; Five 5/8" buttons.

13
PATTERN
PIECES


A


B

FABRICS AND TEXTILES

UNIT I

HANDOUT 4--STRETCH GAUGES FROM PATTERN BACKS

For this pattern--4" of knit fabric must stretch crosswise from here → | to here →

For this pattern--4" of knit fabric must stretch crosswise from here → | to here →

For this pattern--4" of knit fabric must stretch crosswise from here → | to here →

For this pattern--3" of knit fabric must stretch crosswise from here → | to here →

For this pattern--3" of knit fabric must stretch lengthwise from here → | to here →

18% Crosswise Stretch: Stable knits with limited stretchability. Used for styles similar to woven garments, but where a more supple look with some "give" for comfort is desired.

20% Crosswise Stretch: Knits with moderate stretch. Used for sportswear where the stretchability factor is for comfort and for closer, not snug, fit.

50% Crosswise Stretch: Stretchy, lightweight knits used for their drapability or a snug fit.

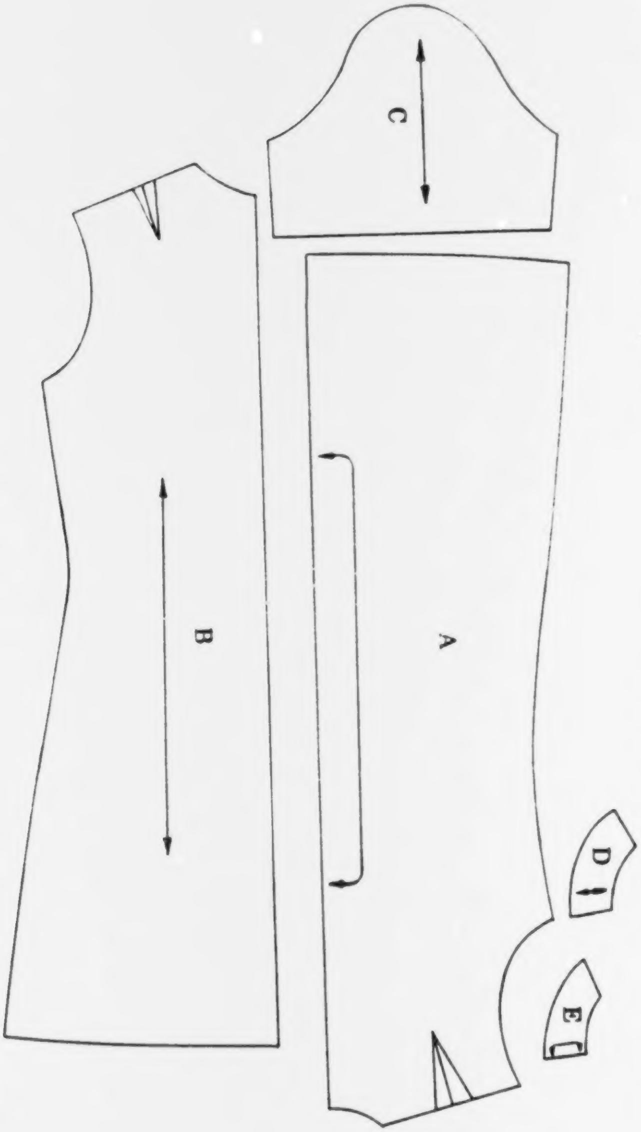
100% Crosswise Stretch: Very stretchy knits with good elasticity and recovery. Used for active sportswear and casual wear with a close fit.

100% Lengthwise Stretch: Swimwear or body wear knit fabrics with good elasticity and recovery.

FABRICS AND TEXTILES

UNIT I

HANDOUT 5--MINI PATTERN



FABRICS AND TEXTILES

UNIT I

ASSIGNMENT SHEET 1--RATE QUALITY CHARACTERISTICS OF FABRICS

Directions: Write a short answer for each situation presented below.

1. Joan is looking for a new all-weather coat to wear to work. She would like one that is good-looking, will hold its shape, and is also suitable for a rain coat. What fibers and fabric finishes should she look for?

   Fibers:

   a.

   b.

   Fabric finishes:

   a.

   b.

2. Sue is going to make a knit T-shirt. How can she determine whether the knit has the right amount of stretch for her pattern?

3. Bob wants to make a cotton sport shirt that will be easy to take care of. At the store he found two fabrics that looked a lot alike and were the right color. The label on the first bolt said "all cotton." The label on the second bolt said "50% cotton/50% polyester." Which fabric would be the best for Bob's shirt? Why?

4. Mary is going to make pajamas for her grandchildren. What fabric treatment should she look for?

5. After you select the pattern for a garment you want to make, what characteristics do you look for to help determine your fabric selections?

   a.

   b.

   52

   c.

6. Define the term "blend." Give three advantages of fabrics made from a blend of natural and man-made fibers.

Definition:

Advantages: a.

b.

c.

FABRICS AND TEXTILES

UNIT I

ASSIGNMENT SHEET 2--PRETREAT FABRIC, NOTIONS, AND TRIMS

Directions: Complete Job Sheet 2. You will have 1/8 yard fabric, 1/8 yard interfacing, and a list of notions necessary for making this dress.

1. Examine your fabric and explain how you would straighten the ends of it. Use the best technique for your type of fabric.

2. Explain how you would pretreat your fashion fabric. Do you also need to preshrink your interfacing? If so, explain how you will do this.

3. List the notions that need preshrinking and explain how you would handle each one.

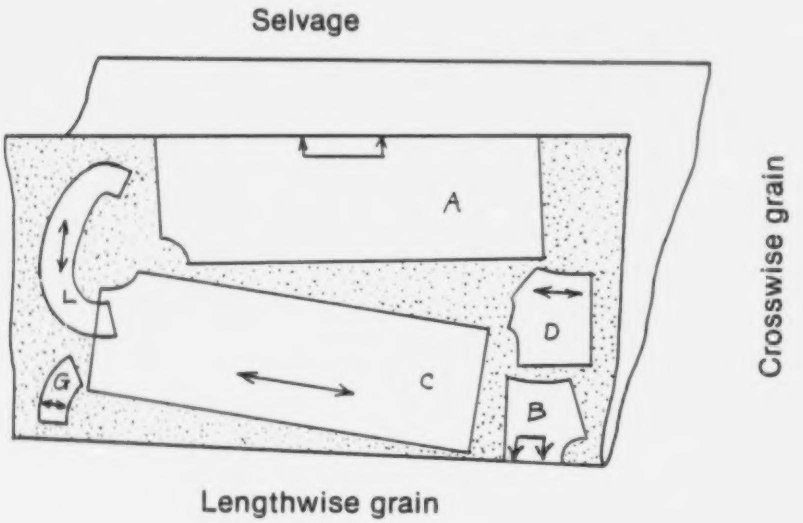
FABRICS AND TEXTILES

UNIT I

ASSIGNMENT SHEET 3--LAY OUT PATTERN PIECES CORRECTLY

Directions: Susan has laid out a pattern on a piece of fabric. Unfortunately, she has made at least five serious mistakes. List and explain the mistakes below.

(NOTE: Dress has seven pieces: A B C D F G L)


Selvage
A
L
D
C
G
B
Crosswise grain
Lengthwise grain

1.

2.

3.

4.

5.

FABRICS AND TEXTILES

UNIT I

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET 1

1. Fibers: Cotton/polyester; wool/polyester; cotton/nylon; similar combinations
   Finishes: Mercerization™; mildew resistance; permanent press; preshrinking and/or Sanforization™; water repellency

2. Stretch the fabric along the "stretch gauge" on the pattern envelope. If the fabric stretches the indicated amount, it is appropriate for that pattern. If it does not, it is not appropriate for that pattern.

3. Bob should buy the **cotton/polyester** shirt. The all-cotton shirt will wrinkle easily when being worn and will require extensive ironing after being washed. The cotton/polyester shirt will require touch-up ironing at most and will not wrinkle while being worn.

4. Children's sleepwear should be made from fabric treated for **flame-resistance.**

5. Look for the "suggested fabrics" section on the pattern back. If there is no layout pattern for napped fabric, then napped fabric is not appropriate. Look for other restrictions, such as "not suitable for stripes or obvious diagonals." Look at the way the fullness is included into the garment to help determine the drapeability needed. Look at the placement of details such as pockets and darts to determine whether stripes, plaids, border prints, and one-way designs will be appropriate.

6. a. A blend may be a **blended** fabric, which is made by blending together two or more fibers before they are spun into yarns; or a **combination** fabric, which is made from two different yarns made from two different fibers, one used for the crosswise grain and the other for the lengthwise grain.
   b. Blended fabrics are improved **economically, aesthetically,** and **functionally.**

ASSIGNMENT SHEET 2

Each situation will be different depending on the fabric and pattern chosen. Questions should be answered to the satisfaction of the teacher.

ASSIGNMENT SHEET 3

1. Selvages not aligned
2. Piece A not on fold
3. Piece C not on straight grain
4. Piece L overlaps piece C
5. Piece L on crosswise, not lengthwise grain
6. Piece F is missing

FABRICS AND TEXTILES

UNIT I

JOB SHEET 1--IDENTIFY UNKNOWN FIBERS WITH BURN TEST

Materials and equipment:

Handout 2--Burn Test
Fabric (small pieces of several different natural and manmade fibers) to include: cotton, wool, acetate, nylon, polyester
Shears
Matches
Kitchen tongs
Small, glass saucers
Fire extinguisher

(NOTE: Procedures on this Job Sheet should be done in a well-ventilated room. Keep all flammable fabrics, papers, and liquids away from working area. Have an appropriate fire extinguisher available in case it is needed.)

Steps of procedure:

1. Cut a small piece of each fabric.

2. Hold one piece of fabric with the tongs and light fabric with a match.

3. Carefully lay fabric on a small glass saucer.

4. Watch the fabric burn, smell the odor it puts off, and look at the residue after fabric has burned up.

5. Compare your results with Handout 3. Decide what fibers you are testing.

6. Repeat with fabrics of several different fiber contents.

FABRICS AND TEXTILES

UNIT I

JOB SHEET 2--COORDINATE PATTERN WITH FABRIC

Materials and equipment:

Handout 3--Pattern Envelope

Steps of procedure:

1. Look at the pattern envelope front and choose one of the three views of the dress pictured. If you choose View A, make it a casual, sporty dress. If you choose View B, use an even plaid and make shoulder pads to keep the dress from looking lighter at the shoulder. With View C, make a dressy dress with self-covered buttons and a belt.

2. For this exercise you are going to make a size 10. Create a shopping list of the fabrics and notions you will need for the view you have chosen:

    a. How much fabric will you need? Consider 45" and 60" fabric.
    b. List the other things you will need.

3. Go to the store and choose an appropriate fabric. Consider quality, color, appropriateness to the pattern, appropriateness to you, and ease of care. Buy 1/8 yard.

4. Select an interfacing for the fabric you have chosen. Consider weight, color, application (sew-in or iron on). Buy 1/8 yard.

5. Select the proper notions and describe them on your list. Include the color, size, and amount you would buy.

FABRICS AND TEXTILES

UNIT I

JOB SHEET 3--CONSTRUCT A T-SHIRT

Materials and equipment:

Knit fabric
Pattern for knit T-shirt
Ribbing
Narrow twill tape or seam binding
Fusible web (optional)
Sewing machine and supplies

Steps of procedure:

1. Preshrink fabric by washing. Dry in dryer and steam lightly if possible.

2. Pin selvages together.

3. Place pattern pieces on fabric, pin, and cut. (Use layout for fabric with nap.)

4. Staystitch all curved areas except those where ribbing will be added.

5. Stitch shoulder seams. Sew over twill tape or seam binding to keep seam from stretching.

6. Sew side seams. Use small zigzag seam, overcast stitch, or serger, if available.

7. Sew neckline ribbing into a circle. Divide circle in fourths and pin to neckline matching shoulder seams, center front, and center back. Sew with an overedge stitch, stretching to fit.

8. Make arm band ribbing and apply it in the same way the neckline ribbing was applied.

9. Finish hemline with an applied ribbing, double-needle stitching, or make an invisible hem using fusible web.

FABRICS AND TEXTILES

UNIT I

JOB SHEET 4--LAY OUT A PLAID SHIRT

Materials and equipment:

Pattern
Plaid fabric
Basic sewing supplies

Steps of procedure:

1. Select plaid fabric.
2. Match plaid starting at selvages and pin at 8" to 10" intervals.
3. Choose dominant stripe in plaid.
4. Lay out shirt front section.
5. Lay out shirt back section, matching side seams below dart. (Check that hemlines are even).
6. Lay out sleeve, matching front notch and dot to front of shirt.
7. Lay out collar, matching center of shirt back or on bias.
8. Lay out pocket, matching plaids or on bias.
9. Check matching areas at center front, center back, sleeve to front at notch, collar to center back, and pocket placement.
10. Cut out garment.

FABRICS AND TEXTILES

UNIT I

JOB SHEET 5--STRAIGHTEN FABRIC

Materials and equipment:

Shears
Woven fabric

Steps of procedure:

(NOTE: Compare the difference between pulling a thread and tearing woven fabric.)

Straightening by pulling a thread

1. Snip selvage 1/2" down from cut edge of fabric.

2. Pull a thread at the snip point, causing fabric to pucker.

3. When fabric won't pucker any more or thread breaks, cut along line.

4. Repeat steps 2 and 3 until you have cut from selvage to selvage.

Straighten by tearing

1. Snip selvage 1/2" down from cut edge of fabric.

2. Holding fabric with both hands, tear across fabric to opposite selvage.
   (NOTE: Some fabrics will not tear across the selvage. If tearing is very difficult or fabric begins to "feather" or tear along with lengthwise grain, stop immediately and use the pull-thread method.)

3. Clip selvage.

4. Now compare the two ways to straighten woven fabric and write a statement as to which is best and why.

FABRICS AND TEXTILES

UNIT I

JOB SHEET 6--LAY OUT A PATTERN

Materials and equipment:

Handout 5--Mini-pattern
7" x 9" piece of fabric
Pins and glue stick

Steps of procedure:

1. Straighten edges and grain; cut fabric down to 5" x 7".
2. Fold fabric for laying out a pattern. Check foldline and straight of grain.
3. Cut out mini-pattern on Handout 5.
4. Pin or glue-stick pattern pieces to fabric just as you would a full-size pattern. Follow all marking and instructions.

FABRICS AND TEXTILES

UNIT I TEST

Part I--Matching: Match each term with its definition by writing the letter(s) in the space provided.

a. Blend
b. Chevron
c. Directional cutting
d. Dye
e. Even plaid
ab. Grain
ac. Interlock knit
ad. Napped fabric
ae. Notions
bc. Preshrink
bd. Quality characteristics
be. Shrink
cd. Sizing
ce. Trims
de. Uneven plaid

___ 1. A plaid where the stripe arrangement is the same in both lengthwise and crosswise directions and which, when folded in any direction through the center of plaid, forms a mirror image

___ 2. Combination of at least two different fibers in one yarn or a fabric made from two or more different yarns

___ 3. Fabrics having fibers that lay smoothly only when brushed in one direction

___ 4. Decorative extras added to create interest and design

___ 5. Substance added to produce or change the color

___ 6. Fabric knit on a special machine to give it a smooth, reversible face

___ 7. Cutting with the grain of the fabric

___ 8. A "V" formed by sewing plaid or striped fabric on the bias and matching at seams

___ 9. All the extras that it takes to make a garment or product: thread, zippers, hem tape, etc.

___ 10. To wash or dry clean fabric and notions before sewing them into a garment or product

___ 11. Chemical and/or starch added to a fabric to give it stiffness and body

___ 12. A plaid where the design is unbalanced in the crosswise or lengthwise direction, or both

Part II--Matching: Match each term with the descriptive phrase by writing the letter(s) in the space provided.

a. Single or jersey
b. Rib
c. Purl
d. Interlock or double
e. Jacquard
ab. Tricot
ac. Raschel

___ 13. Made from two sets of yarns knitted together; resists snagging and running better than single knits. The front and the back are like a jersey knit. The "back" is in the center and does not show.

___ 14. A more complicated version of tricot method. Used for lacy, textured knits and open work. Used on sweaters, T-shirts, and on lace fabric yardage.

___ 15. An interlock knit with an intricate pattern and/or texture

___ 16. The front side is smooth and has vertical wales (up and down lines). The back side is pebbly and has horizontal lines. Susceptible to snagging and running.

___ 17. Horizontal lines alternate with horizontal valleys. Back and front are the same, and the fabric has more vertical stretch.

___ 18. Soft, drapable, smooth appearing knit used for swim-wear and dance-wear. Does not run. Does not stretch unless a stretch yarn (such as spandex) is used.

___ 19. Vertical ribs alternating with valleys in a regular pattern (2/2 or 1/1). Back and front are the same. Has good horizontal stretch and recovery. Used for cuffs, necklines, and waistbands.

Part III--Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 20. When in a fabric blend, which fiber increases strength and abrasion resistance?

a. Wool
b. Nylon
c. Modacrylic
d. Rayon

___ 21. Which is a quality characteristic of fabric?

a. Color shade
b. Texture
c. Evenness of the weave
d. Depth of the nap

___ 22. How are notions and trims preshrunk?

a. Wash them in the washing machine.
b. Soak by hand in hot water.
c. Roll them in a damp sheet.
d. Take them to a dry cleaner.

___ 23. What does the term "with nap" mean when laying out fabric?

a. The pattern pieces may be laid in any direction.
b. The pattern pieces must all be placed in the same direction.
c. Fabric should not be folded when pattern pieces are laid.
d. Fabric has stretch and pattern pieces must be laid on grain.

___ 24. With which fabric might the yardage requirement for a particular pattern change?

a. Stretch
b. Woven
c. Wool
d. Napped
e. Knit

___ 25. How should the straight arrow on pattern pieces be aligned with the fabric?

a. On the fold of the fabric
b. On straight bias cut of the fabric
c. With crosswise grain
d. With lengthwise grain

___ 26. What must be considered when laying out a pattern?

a. Amount of shrinkage
b. Care of the fabric
c. Grain of the fabric
d. Direction to cut

___ 27. Which statement is **not** true about knit fabrics?

a. Some knits are stable and can be handled like wovens.
b. Knits are available in every weight and texture.
c. Knits stretch in one direction only.
d. The amount of stretch depends largely on the knit's tightness and the fiber used.

___ 28. What is the best way to identify grainlines in a piece of woven fabric?

a. Tear along the selvage edges
b. Pull a thread and trim along thread line
c. Follow rib of fabric
d. None of the above

___ 29. Fabrics that need a napped layout require more fabric. Which of the following fabrics require extra yardage?

a. Wool
b. Linen
c. Polyester fleece
d. Rayon

___ 30. You have selected a pattern and have prepared your fabric. You are ready to lay out and cut the pattern. Which of these directions should you follow?

a. Lay and cut out large pattern pieces; then lay and cut out small ones.
b. Follow the first pattern layout suggestion given in the directions.
c. Lay and cut one piece. Continue to lay out and cut one piece at a time.
d. Follow the layout for the selected view. Pin all pieces in place before cutting.

___ 31. You are buying fabric to make a coat and want wool made from fibers that have never been made into fabric before. What should the label read?

a. Reprocessed
b. Virgin
c. Reused
d. Any of the above

___ 32. Select the fabric preparation guideline which is **false.**

a. Fabric has been preshrunk.
b. Fabric ends have been straightened.
c. Fabric is laid out on the bias.
d. Fabric is folded as layout shows.

___ 33. Which statement is **not** a layout or cutting guideline?

a. Grainlines are parallel to the selvages.
b. Hold fabric up for short, even cutting strokes.
c. For napped fabrics, all pins are within the seam allowance.
d. Cut around multiple notches in one continuous strip.

___ 34. Which is a natural fiber?

a. Rayon
b. Linen
c. Polyester
d. Acetate

___ 35. Which is a characteristic of most man-made fibers?

a. Shrink resistant
b. Absorbent
c. Static resistant
d. Require pressing

Part IV--True/False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 36. Plaids are the only fabrics that must be matched at the seams.

___ 37. Madras plaids are hard to match.

___ 38. Chevron refers to the hemline of a garment.

___ 39. Pockets on a plaid garment are cut on the crosswise grain or to match the plaid.

___ 40. Even plaids require less fabric than uneven plaids.

___ 41. All plaids require a fusible interfacing.

___ 42. Cotton is the only fabric available in even plaids.

___ 43. "Crocking" refers to the fading of fabric when folded on the bolt.

___ 44. Pattern alterations should be made to the pattern before cutting out all fabric.

___ 45. The dominant plaid line should be at the side seam of a dress or skirt.

___ 46. Permanent press fabrics cannot be straightened.

___ 47. Suggested fabrics on the pattern envelope will help create the look intended by the designer.

___ 48. Excess sizing ensures a stiff fabric, wash after wash.

___ 49. All stitching should be in the direction of the nap of the fabric.

Part V--Matching: Match each dyeing method with its descriptive phrase by writing the letter in the space provided.

a. Fiber dyeing
b. Piece dyeing
c. Solution dyeing
d. Yarn dyeing

___ 50. Color is added to the fabric after it is made. Usually one color is used. Dye may not penetrate as deeply into the fabric. An economical method.

___ 51. Color is added before the fabric is made. Color penetration is good. Fabrics can be made in checks, plaids, and stripes.

___ 52. The color is added to the spinning solution of man-made fibers. Color is fast to sunlight and washing.

___ 53. Color is added before the yarn is spun. Dye penetration is even. Fabrics can be made in tweeds and heathers.

USING FABRICS AND TEXTILES

ANSWERS TO UNIT I TEST

Part I:

1. e
2. a
3. ad
4. ce
5. d
6. ac
7. c
8. b
9. ae
10. bc
11. cd
12. de

Part II:

13. d
14. ac
15. e
16. a
17. c
18. ab
19. b

Part III:

20. b
21. c
22. b
23. b
24. d
25. d
26. c
27. c
28. b
29. c
30. d
31. b
32. c
33. b
34. b
35. a

Part IV:

36. F
37. T
38. F
39. T
40. T
41. F
42. F
43. T
44. T
45. F
46. T
47. T
48. F
49. T

Part V:

50. b
51. d
52. c
53. a

Custom Sewing

Adjusting the Home Sewing Machine
Unit II

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1			1		1-2, 4, 6, 7, 9, 11, 14-15	
-	2		1	1, 2		3, 5, 8, 10, 12-13, 37-38	
-	3					16-21	
D4	4				1	22-28	
D6	5				2	39-40	
D2	6				3, 4, 5, 6	41-42	
D1, D3	7		2, 3		7, 8	43-44	
-	8				9	29-36	

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

ADJUSTING THE HOME SEWING MACHINE

UNIT II

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to adjust and maintain the home sewing machine and be able to select factors to consider when planning a sewing machine purchase. Competencies will be demonstrated by correctly performing the procedures outlined in the Assignment and Job Sheets and by scoring at least 85 percent on the Unit Test.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Based on the content outline, MATCH TERMS ASSOCIATED WITH ADJUSTING A HOME SEWING MACHINE TO CORRECT DEFINITIONS by completing Assignment Sheet 1 and by achieving 100 percent accuracy on the Unit Test.
2. Based on the content outline and Handout 1, IDENTIFY PARTS OF A SEWING MACHINE AND GIVE THEIR FUNCTIONS/DESCRIPTIONS by completing Assignment Sheets 1 and 2 and by achieving 100 percent accuracy on the Unit Test.
3. Based on the content outline, IDENTIFY SEWING MACHINE ACCESSORIES by achieving 100 percent accuracy on the Unit Test.
4. Based on the content outline, LIST PARTS/AREAS OF A SEWING MACHINE WHICH REQUIRE MAINTENANCE by completing Job Sheet 1 and by achieving 100 percent accuracy on the Unit Test.
5. Based on the content outline, CHOOSE CORRECT NEEDLE and IDENTIFY REASONS FOR CHANGING MACHINE NEEDLES by completing Job Sheet 2 and by achieving 100 percent accuracy on the Unit Test.
6. Based on the content outline, THREAD SEWING MACHINE and ADJUST PRESSER FOOT PRESSURE AND STITCH LENGTH by completing Job Sheets 3, 4, 5, and 6 and by achieving 100 percent accuracy on the Unit Test.
7. Based on the content outline and Handouts 2 and 3, IDENTIFY PROBLEMS CAUSED BY INCORRECT THREAD TENSION by completing Job Sheets 7 and 8 and by achieving 100 percent accuracy on the Unit Test.
8. Based on the content outline, RECOGNIZE FACTORS TO CONSIDER WHEN BUYING A SEWING MACHINE by completing Job Sheet 9 and by achieving 100 percent accuracy on the Unit Test.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Provide students with Objective Sheet.

C. Discuss Unit and Specific Objectives.

D. Provide students with Information Sheet.

E. Discuss the Information Sheet.

F. Provide students with Handouts, Assignment and/or Job Sheets prior to the demonstration of the procedures. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

G. Integrate the following activities throughout the teaching of this unit:

1. Introduce the unit by explaining the terminology provided on the Information Sheet.
2. Invite a speaker to discuss sewing machine maintenance.
3. Invite an extension specialist to discuss factors to consider when purchasing a sewing machine.
4. Take a field trip to local sewing centers.

H. Give test.

I. Evaluate test.

J. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Handouts

1. HO 1--Parts of the Sewing Machine

    2. HO 2--Sewing Tips
    3. HO 3--Problem Solving

F. Assignment Sheets

    1. AS 1--Sewing Machine Related Words
    2. AS 2--Identify Parts of the Sewing Machine

G. Answers to Assignment Sheets

H. Job Sheets

    1. JS 1--Clean and Oil the Sewing Machine
    2. JS 2--Change Sewing Machine Needle
    3. JS 3--Wind, Insert, and Thread Bobbin
    4. JS 4--Thread the Sewing Machine
    5. JS 5--Adjust Presser Foot Pressure
    6. JS 6--Adjust Stitch Length
    7. JS 7--Adjust Upper Thread Tension
    8. JS 8--Adjust Lower Thread Tension
    9. JS 9--Compare Home Sewing Machines

I. Unit Test

J. Answers to Unit Test

RESOURCES

(NOTE: See Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

ADJUSTING THE HOME SEWING MACHINE

UNIT II

INFORMATION SHEET

I. Terms and definitions

(Objective 1; AS 1)

A. Backstitch--reinforcement at the beginning and end of a seam done by stitching backwards for a few stitches

B. Bed--flat base of the machine which supports the head and houses the bobbin and bobbin case

C. Bobbin hook race/shuttle--circular piece of metal surrounding the bobbin that turns to catch the upper thread and the bobbin thread to form the stitch

D. Cam--circular piece of metal or plastic, either built-in or inserted into the machine, that controls stitch formation by its outer edge indentations; used to make decorative stitches

E. Head--total sewing machine excluding the cabinet or base on which it rests

F. Pressure--amount of force the presser foot puts on the fabric during stitching. Pressure should be adjusted to suit the fabric.

G. Straight stitch machine--a machine that sews a straight line forward and (usually) backward. Some are available with accessories to enable them to perform other types of stitching.

H. Tension--tightness of the upper (needle) and lower (bobbin) threads which interlock to form a stitch. When the two threads are balanced, they are drawn into the fabric to the same degree.

I. Zigzag machine--a machine that sews a straight line plus other types of stitches. Most zigzag machines make buttonholes, sew on buttons, make a blind hem, and make decorative stitches.

II. Parts of the sewing machine

(Objective 2; HO 1; AS 1, 2)

A. Bobbin--small, round, metal or plastic spool which is inserted into the bobbin case. The bobbin holds the bottom thread supply for the machine.

B. Bobbin case--circular metal or plastic case beneath the slide plate that holds the bobbin

C. Bobbin indent--found on some sewing machines, the small indentation on the inside of the handwheel that serves the same purpose as the clutch release or flywheel. When pressed, it stops needle movement to allow bobbin winding.

D. Bobbin spindle--a post and a clamp on top of the machine which holds the bobbin in place during winding

E. Bobbin winder tension disc or bracket--small, round metal disc on top of machine which puts tension on the thread during bobbin winding so that bobbin is wound evenly

F. Bobbin winder stop latch--small metal bar which is pushed up against the bobbin while it is being wound. It helps to control the tension on the thread and keeps the thread winding evenly on the bobbin.

G. Buttonhole dial--small knob found on some machines that controls the stitching for built-in buttonholers. It is located either on the front or included on the needle position selector.

H. Face plate--removable cover along the left side or front of the machine that protects sewing light and movable parts (needle and presser bar elements). The cover is removed for oiling and servicing.

I. Electrical connections--dual cord that connects the machine to an electrical outlet and to the speed controller.

J. Feed dog (feed system) (feed)--small, projecting metal or rubber grid of teeth directly under the needle. It rotates in a small vertical circle as the machine operates, moving the fabric smoothly under the presser foot one stitch at a time.

K. Handwheel--large wheel on the far right end of the machine that controls needle movement. It may be turned manually to raise and lower the needle to place and remove fabric, for stitching, and for threading the needle. Always turn the wheel counterclockwise (toward you) on a standard home sewing machine.

L. Handwheel release, clutch release, or flywheel--round knob in the center of the handwheel. When loosened, it disengages the gears and stops needle movement to allow bobbin winding. It must be kept tight for stitching.

M. Needle--strong, metal shaft with a small hole (eye) near its pointed end. When the sewing maching needle moves up and down, the bobbin thread and upper thread meet and form a stitch. The blunt end is specially shaped to fit the particular brand and/or model of sewing machine and must be inserted correctly.

N. Needle clamp--small clamp directly above the needle that is controlled by a screw. When the screw is tightened, the clamp holds the needle in place for sewing. When loosened, it allows the needle to be removed.

O. Needle position selector--small knob or lever near the top of some machines which controls the needle position for left, center, and right stitching

P. Pattern selector--metal lever or dial that controls selection of decorative and utility stitches

Q. Power and/or light switch--an on/off switch located on the side or front of the machine that turns the machine and/or the sewing light on or off

R. Presser foot--piece of metal or plastic attached to the bottom of the presser bar that holds fabric against the feed dog and keeps the fabric in place during stitching.

S. Presser foot lifter--curved metal lever, usually on the left or back side of the machine, which raises and lowers the presser foot

T. Pressure control--spring-controlled button that increases pressure on the presser foot when it is pushed down and decreases the pressure on the presser foot when it is released

U. Presser foot screw or clamp--screw or a piece of metal that holds the presser foot in place; is released to remove the presser foot

V. Reverse control--knob, button, or lever usually connected to the stitch length selector. When pressed or activated, it reverses the direction of the feed dog so that the machine sews backwards.

W. Slide plate--metal plate covering bobbin area. The plate slides or opens for removal, replacement, and/or adjustment of bobbin, bobbin case, and for maintenance and repair.

X. Spool pin--slender plastic or metal rod on top or on the back of the machine that holds spool(s) of thread for sewing

Y. Stitch length selector--a dial or lever, usually near the right end of the machine, which controls the length of the stitch

Z. Stitch width selector--a dial or lever, usually on the front of the machine, which controls the width of stitches and sets needle for straight or zigzag stitching

AA. Take-up lever--metal rod that projects from a slot on the front or side of machine. It draws the correct amount of thread for each stitch from the top spool as it moves up and down.

BB. Tension discs--small, thin, metal or plastic plates connected to the tension dial that control the degree of tension on the upper thread and permitting proper, uniform stitching

CC. Tension dial--knob or dial which is turned to increase or decrease the amount of tension on the upper thread

DD. Thread cutter--small, sharp device on the back of the presser bar used to cut the sewing threads so the work can be removed from the machine

EE. Thread guides--small, metal hooks that hold the thread in place during stitching

FF. Throat plate--metal plate surrounding the feed dog that protects against lint build-up and supports the fabric during sewing

III. Accessories

(Objective 3)

(NOTE: The following accessories are available for most models of sewing machines. Some are included with the machine when it is purchased; some are sold separately.)

A. Needles--single and twin (double), sharp, and ball point

B. Secondary spool pin

C. Spool holders

D. Transparent plastic or metal bobbins

E. Lint brush

F. Oil container

G. Varieties of presser feet

(NOTE: Not all feet listed are available on all machines.)

1. General purpose (straight stitch)
2. Buttonhole
3. Button
4. Zipper
5. Darning and embroidery
6. Overedge
7. Gathering
8. Even feed
9. Pin tuck
10. Narrow hemmer

H. Types of plates

1. General purpose
2. Straight stitch
3. Feed cover

I. Gauges and guides

1. Seam gauge
2. Quilter guide bar
3. Blind stitch hemmer guide

J. Chain stitch fittings

K. Ruffler attachment

L. Buttonhole attachment

M. Binder

N. Cams

O. Light bulb

IV. Caring for the machine

(Objective 4; JS 1)

A. Cleaning the machine

1. Disconnect power plug from electrical outlet.
2. Wipe machine surfaces and covers with a damp, soft cloth and mild soap.
3. Use a lint brush to remove lint and dirt from the following areas.
    a. Tension discs
    b. Take-up lever
    c. Thread guides
    d. Presser bar
    e. Needle bar
    f. Bobbin case
    g. Needle plate areas
4. If oily fibers are packed in the bobbin case area, remove them carefully with a toothpick.
5. Wipe away old oil with a clean cloth.
6. Remove all lint and thread from moving parts and work area. Lint and thread will clog the machine and cause it to work harder, wear out faster, operate stiffly, or refuse to run at all.

B. Oiling the machine

1. Most machines require complete lubrication only once a year. However, most machines require frequent oiling in specific places as the machine is used.
   (NOTE: Frequency of machine lubrication and oiling may be determined by how much the machine is used. Check the machine manual.)
2. The manual includes a diagram of the areas needing periodic oiling. Place one drop of oil in each spot indicated.
3. Re-assemble machine parts removed for cleaning.
4. Stitch on a scrap of fabric until all excess oil is absorbed.

C. Periodically, most machines should be checked by a local sewing center for wear and adjustment.

D. Most light bulbs can be changed easily. Check machine manual for specific directions. Most machines use a 15-watt light bulb. Note that some use a rachet-type base and some use a screw-type base. Consult the machine manual.

V. Machine needles

(Objective 5; JS 2)

A. Needle selection

1. Type of thread--eye of needle must be large enough for thread to pass through freely
2. Type of fabric
    a. Needle must be fine enough to go into fabric without leaving a large hole.
    b. Needle must be heavy enough to go into fabric without bending or breaking.

3. Needles are available in sizes from very fine to very coarse. American sizes (small to large) are usually numbered: 9, 11, 14, 16, 18. European sizes (small to large) are usually numbered: 60, 70, 80, 90, 110. Additional sizes may also be available.
4. Types of sewing machine needles
    a. Sharp-point
        i. Used most often
        ii. Can be used on all types of woven fabrics and many knits
    b. Ball-point (sometimes called "gold band")
        i. Rounded point
        ii. Used on all types of knits
    c. Wedge-point
        i. Sharp point
        ii. Used on leathers and vinyl
    d. Double (twin) and triple
        i. Used for decorative stitching
        ii. Limited range of sizes

B. Reasons to change machine needles

1. Broken, blunt (dull), burred, or bent
    a. A blunt needle causes pulls in the fabric.
    b. A bent needle causes fabric to draw to one side and feeds in a curve instead of a straight line. ***(See Figs. 2-1 and 2-2.)***
2. Repeated thread breakage during sewing
3. Skipped stitches
4. Change in fabric weight and/or fiber content
5. Change in thread weight

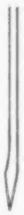


FIG. 2-1
Bent needle

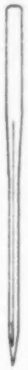


FIG. 2-2
Good needle

C. Replacing the needle

(NOTE: Consult your machine manual before following these steps. Most needles must be put in a certain way, and an incorrectly placed needle may damage the machine. For most machines, do the following.)

1. Loosen needle clamp screw.
2. Pull old needle down and out (it may fall out).
3. Push new needle up into clamp as far as possible, with the flat side of shank facing away from, and the groove of the needle facing toward, the last thread guide.
4. Tighten needle clamp screw.

VI. Threading the machine

(Objective 6; JS 3, 4, 5, 6)

A. Wind the bobbin.

1. Begin with an empty bobbin.

2. If there are bobbin tension guides, use them.
3. Wind bobbin evenly. ***(See Fig. 2-3 and 2-4.)***
4. Do not wind bobbin tight.
5. If thread spool threatens to fly off the spindle and into the air, use a plastic straw to extend the length of the spindle or hold spool down with the eraser end of a pencil.

FIG. 2-3
Even

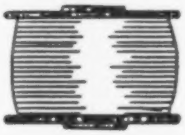
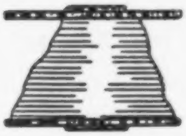


FIG. 2-4
Uneven



B. Thread the bobbin case. (Consult machine manual and follow directions carefully.)

C. Thread the tension discs and the needle.

1. Raise presser foot to allow thread to pass between tension discs.
2. Take-up lever should be at its highest point to keep needle from becoming unthreaded when the first stitch is made.
3. Follow the threading path in the manual exactly.

D. Raise the bobbin thread.

1. Turn the handwheel clockwise until the needle goes down into the bobbin area and comes back up. The needle thread should loop around the bobbin thread.
2. Pull the needle thread up. This should also pull the bobbin threads up through the hole in the throat plate.
3. Pull both threads to the side or back as instructed in the manual.

E. Pressure, feed, and stitch length

1. Presser foot pressure
    a. Provides a downward force which holds the layers of fabric so they move evenly together during stitching
    b. Effects the straightness of the seams, the uniformity of the stitch length, and the even manipulation of fabric layers
    c. Prevents fabrics from being pulled down into the bobbin area
    d. Prevents fabrics from gathering up around the needle, which could lead to skipped stitches
    e. Is controlled by the presser bar cap or pressure dial. Some machines have built-in or automatic pressure adjustments, and therefore have no cap or dial.
2. Feed/feed system/feed dog
    a. Provides an upward and forward force moving fabric(s) under the presser foot
    b. Moves fabric into position for each stitch
    c. Allows the layers of fabric to be drawn tight for proper stitch formation
    d. The stitch length control determines how far forward (or backward) the fabric is moved by each rotation of the feed mechanism.
3. Stitch length
    a. Ideal stitch length depends on:
        1) Weight of the fabric (delicate, heavy)

        2) Texture of the fabric (soft, crisp)
        3) Type of sewing (topstitch, curved seam, basting)
    b. Quality garments are sewn with:
        1) Short stitches
        2) Appropriate weight of thread
        3) Appropriate type of thread
    c. Economy clothing is sewn with:
        1) Longer stitches
        2) Less durable thread
    d. On most stitch length selectors:
        1) Short stitches are 14-16 stitches per inch.
        2) Average stitches are 8-12 stitches per inch.
        3) Long stitches are 4-6 stitches per inch.
    e. The stitch length lever or a connected button also controls the backstitch option, which reverses the direction of the feed dog.

VII. Thread tension

(Objective 7; HO 2, 3; JS 7, 8)

A. Tension controls increase and decrease the pressure on the threads as they feed through the machine.

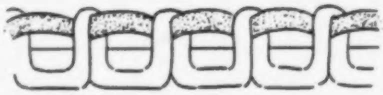


FIG. 2-5

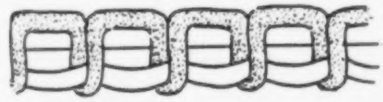


FIG. 2-6

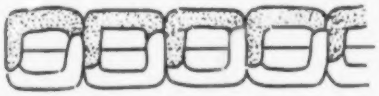


FIG. 2-7

1. Too much pressure causes fabric to pucker and stitches to break. *(See Fig. 2-5.)*
    a. Too much tension
    b. Too little thread for stitches
2. Too little pressure causes weak, limp seams. *(See Fig. 2-6.)*
    a. Too little tension
    b. Too much thread for stitches
3. Correct pressure *(See Fig. 2-7.)*
    a. Correct tension
    b. Threads lock in the center of fabric layers.

B. Most machine dials translate:

1. Low degree of tension = low number on dial
2. High degree of tension = high number on dial

C. Amount of tension needed depends on the fabric weight.

1. Heavyweight fabric requires high tension.
2. Lightweight, thin fabric requires low tension.

D. Bobbin thread tension is controlled by a small screw on the side of the bobbin case.

1. Turn screw clockwise to increase tension.
2. Turn screw counterclockwise to decrease tension.

(**CAUTION:** Bobbin tension adjustments are seldom necessary and should be made as a last resort. Make very small turns on the screw and test.)

E. To test tension setting, stitch on two layers of the fabric with the thread you will use to sew the garment. Examine the stitches. Make adjustments if necessary.

VIII. Tips for buying sewing machines

(Objective 8; JS 9)

A. Investigate several sewing machine brands and styles.

B. Ask for a demonstration of the machines' features.

C. Test the machine yourself. Beware of demonstration fabric--it is usually stiff and makes every stitch look perfect. Bring a packet of test fabrics consisting of one of each of the following: sheer, woven cotton, tricot, light wool, acrylic knit, heavy wool, and polyester double knit. Sew on each of these fabrics and evaluate the machine's performance.

D. Ask friends who have machines what they think about your prospective purchase.

E. Read consumer magazine performance reports, e.g. Consumer Reports.

F. Buy your machine from an established dealer who has a good reputation for service. Get answers to these questions.

1. Can servicing be done out-of-town if you move?
2. How easy is it to get parts?
3. How long is the guarantee period and what is the extent of the coverage?
4. What type of maintenance is required?
5. Are there free lessons with the purchase?

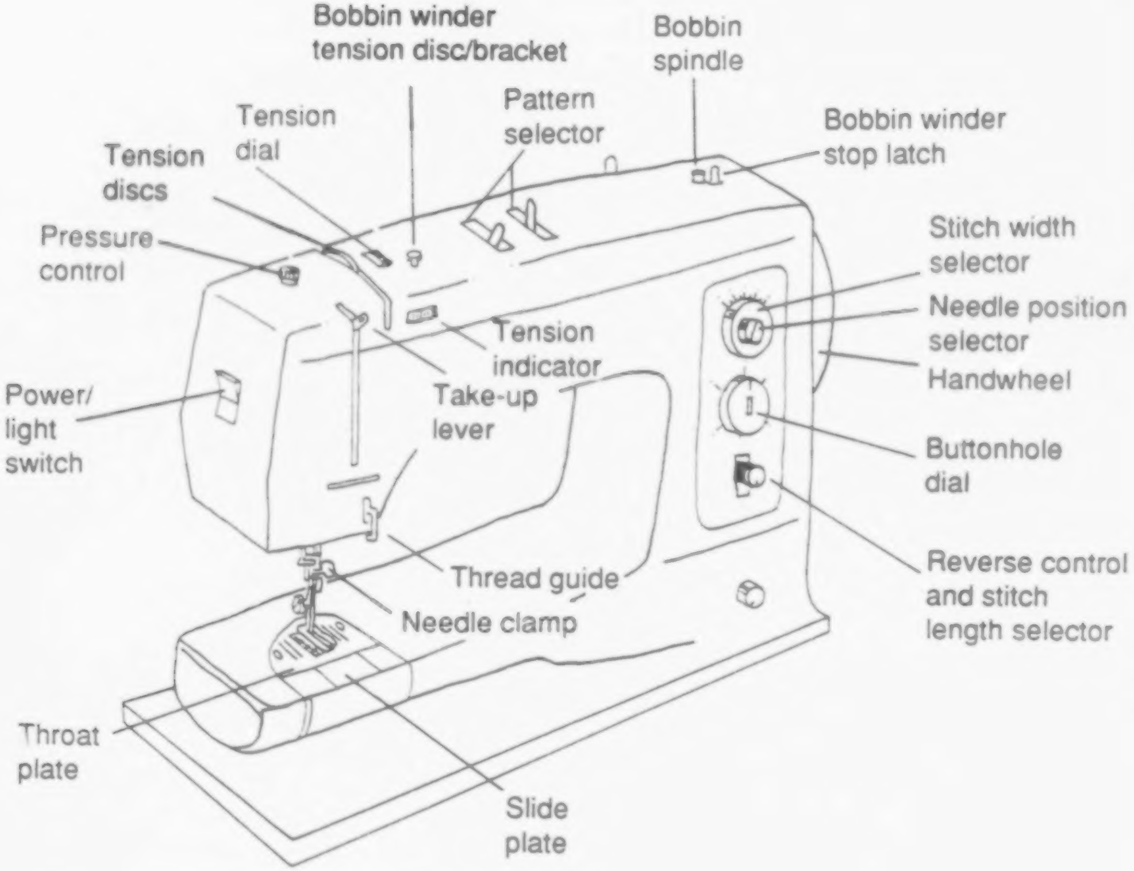
G. Basic features

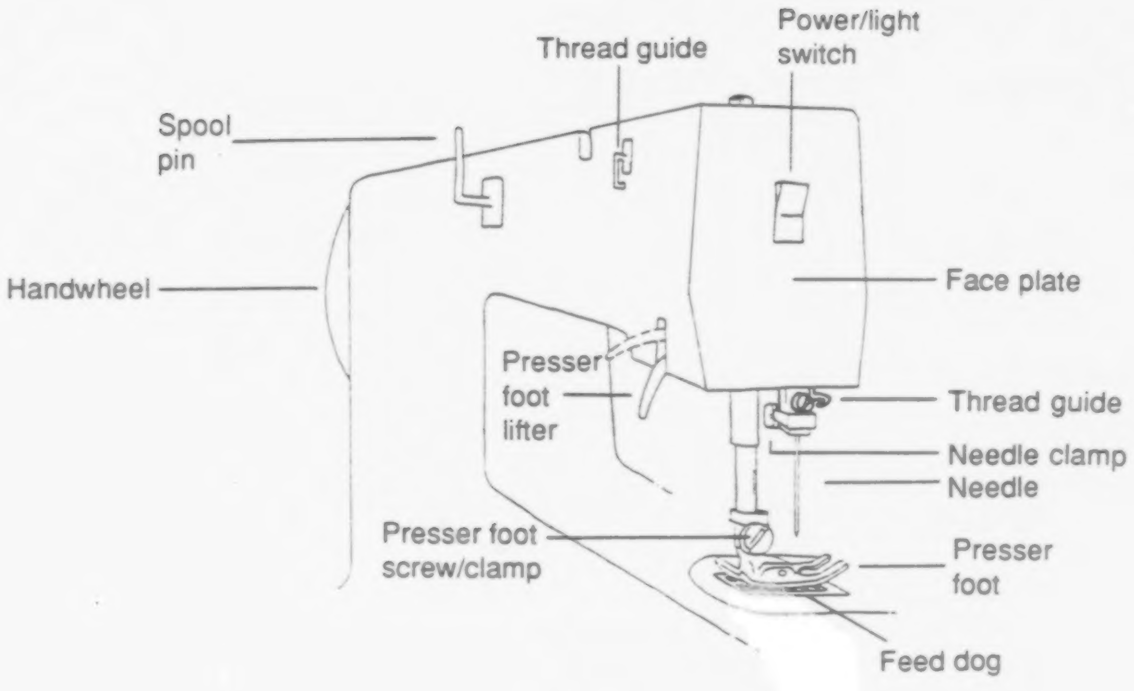
1. Free arm/flatbed
2. Extension table
3. Built-in stitches
4. Reverse stitching
5. Pressure regulator
6. Feed dog
7. Speed regulator
8. Foot control
9. Bobbin case
10. Presser feet
11. Tension adjustment
12. Buttonholes
13. One-motion threading
14. Light

ADJUSTING THE HOME SEWING MACHINE

UNIT II

HANDOUT 1--PARTS OF THE SEWING MACHINE


Bobbin winder tension disc/bracket
Bobbin spindle
Tension dial
Pattern selector
Bobbin winder stop latch
Tension discs
Pressure control
Stitch width selector
Needle position selector
Tension indicator
Handwheel
Power/ light switch
Take-up lever
Buttonhole dial
Reverse control and stitch length selector
Thread guide
Needle clamp
Throat plate
Slide plate


Thread guide
Power/light switch
Spool pin
Handwheel
Face plate
Presser foot lifter
Thread guide
Needle clamp
Needle
Presser foot screw/clamp
Presser foot
Feed dog

ADJUSTING THE HOME SEWING MACHINE

UNIT II

HANDOUT 2--SEWING TIPS

1. Read the owner's manual/instruction booklet carefully and entirely.
2. Ask the dealer for a complete demonstration of your machine **before** you buy it. If the dealer offers lessons, take them even if you are experienced. They will help you understand the full potential of your machine.
3. Before you begin sewing, acquaint yourself with all of the controls.
4. Keep a supply of several sizes of sharp and ballpoint needles handy.
5. Sit in front of the machine needle, not in front of the center of the machine.
6. When adjusting needle height, always turn the handwheel toward you.
7. Be sure the take-up lever is at its highest point before removing fabric from the machine.
8. When changing from one operation to another, check all controls to make sure they are correct for the new operation.
9. Never change needle positions when the machine is running or when the needle is in the fabric.
10. Place a pad or throw rug under the foot control if it tends to scoot around the floor.
11. Keep a container with accessories and sewing aids near you for quick changes.
12. When using a twin needle, be careful that you do not set the zigzag width too wide or the needle will break.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

HANDOUT 3--PROBLEM SOLVING

The following information may help you solve sewing machine problems before you call a repair/service person.

1. Bobbin winds unevenly:

   - Machine may be running too fast.
   - Threading may be incorrect.
   - Bobbin-winding tension spring may need adjusting.

2. Bobbin thread breaks:

   - Bobbin case may be clogged with lint or dirt.
   - Bobbin case may be inserted incorrectly.
   - Bobbin may be threaded improperly.
   - Bobbin tension may be too tight.
   - Bobbin may be too full.
   - Bobbin may be wound incorrectly.
   - Bobbin thread may be knotted.

3. Fabric feeds improperly under presser foot:

   - Presser foot or accessory may be attached incorrectly.
   - Presser foot may not be down.
   - Pressure may be set inappropriately for the weight and texture of fabric.
   - Stitch length may be inappropriate for weight and texture of fabric.
   - Feed dog may be surrounded by lint or dirt.
   - Feed dog may be disengaged.

4. Feeding and stitching are irregular:

   - Presser foot pressure may be too light.
   - Thread may be poor quality.
   - Bobbin may be threaded incorrectly.
   - There may be lint or dirt between tension discs or under the bobbin case tension spring.
   - Presser foot may not be securely in position.
   - Operator may be pushing or pulling fabric too much.
   - Stitching over pins may be causing problems.
   - Straight stitching job may require use of the straight stitch foot and throat plate.

5. Machine is noisy and/or runs roughly:

   - Needle may be damaged.
   - Bobbin may be nearly out of thread.
   - Oil and lint may be built up in hook race/shuttle or under the needle plate.
   - Machine may need to be cleaned and oiled.
   - Machine may have been oiled with the wrong kind of oil.
   - Machine may be stiff from sitting in a cold room.
   - Stitch length and width setting may be inappropriate for the stitch pattern being used.

6. Needle breaks:

   - Needle may be hitting pins as it tries to stitch over them.
   - Needle may be inserted incorrectly.
   - Needle clamp screw may be loose.
   - Needle may be bent.
   - Fabric may have been too heavy for needle size.
   - Operator may be pulling fabric too much.
   - Presser foot may not be securely in position.
   - Incorrect presser foot and/or throat plate may be in place.

7. Needle does not move:

   - Handwheel may be disengaged.
   - Electrical connections may not be attached to machine and/or outlet properly.
   - Power may be off.
   - Bobbin may be too full.

8. Needle moves but does not form a stitch:

   - Bobbin may be empty.
   - Bobbin and/or bobbin case may be inserted incorrectly.
   - Machine may be improperly threaded.
   - Needle may be inserted incorrectly.
   - Needle may be wrong length.

9. Pressure regulator is hard to adjust:

   - Presser foot must be lowered when making adjustments.
   - Regulator may be turned to its maximum; turn it the other way.

10. Seams pucker:

    - Tension may be too tight.
    - Presser foot pressure may be too heavy.
    - Machine may be threaded incorrectly.
    - Bobbin may be wound too full.
    - Needle may be wrong size or damaged.

- Stitch length may be too long or too short for fabric.
- Upper and lower threads may be different sizes.

11. Stitches skip:

- Needle may be inserted incorrectly.
- Needle point may be blunt, broken, bent, or dull.
- Needle may be too small for thread.
- Thread may be of poor quality or wrong content for fabric.
- Machine may be threaded incorrectly.
- Presser foot may not be holding fabric firmly over the needle hole.
- Presser foot pressure may be too light.

12. Upper thread breaks:

- Needle may be inserted improperly.
- Machine may be threaded incorrectly.
- Tension may be too tight.
- Needle may be blunt, bent, or wrong size.
- Poor quality thread may be knotting.
- Thread may be caught on or under spool pin.
- Thread may be too heavy for needle.
- Bobbin case may be inserted incorrectly.
- Threads may not have been pulled to correct position under presser foot at the start of sewing.
- Throat plate may have a roughened hole.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

ASSIGNMENT SHEET 1--SEWING MACHINE RELATED WORDS

Directions: Write the correct term before its definition.

________ 1. The tightness of the upper (needle) and lower (bobbin) threads which interlock to form a stitch

________ 2. Circular pieces of metal or plastic, either built in or inserted into the machine, that control stitch formation by their outer edge indentions

________ 3. Machine that sews a straight line plus other types of stitches. Most make buttonholes, sew on buttons, make a blind hem, and make decorative stitches.

________ 4. Circular piece of metal surrounding the bobbin that turns to catch the upper thread and the bobbin thread to form the stitch

________ 5. Reinforcement at the beginning and end of a seam

________ 6. Total sewing machine excluding the cabinet or base on which it rests

________ 7. Amount of force the presser foot puts on the fabric during stitching

________ 8. Strong, metal shaft with a small hole (eye) near its pointed end

________ 9. Metal plate surrounding the feed dog which protects against lint build-up and supports the fabric during sewing.

________ 10. Flat base of the machine which supports the head and houses the bobbin and bobbin case

________ 11. Piece of metal or plastic attached to the bottom of the presser bar that holds fabric against the feed dog and keeps the fabric in place during stitching

________ 12. Large wheel on the far right end of the machine that controls needle movement

________ 13. Circular metal or plastic case beneath the slide plate that holds the bobbin

________ 14. The original sewing machine stitch used to sew a regular seam

________ 15. Small, projecting metal or rubber grid of teeth directly under the needle which rotates in a small vertical circle as the machine operates to move the fabric smoothly under the presser foot one stitch at a time

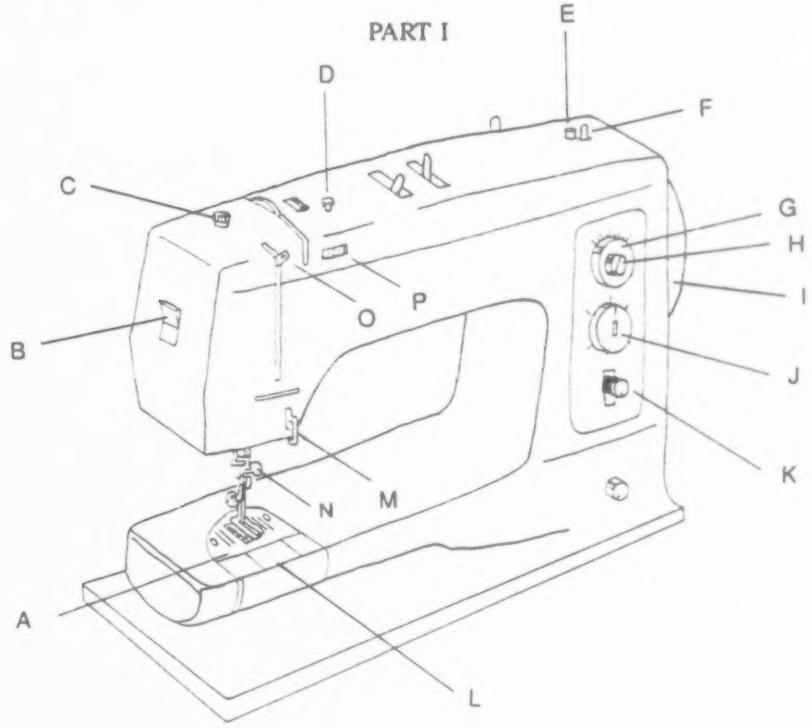
ADJUSTING THE HOME SEWING MACHINE

UNIT II

ASSIGNMENT SHEET 2--IDENTIFY PARTS OF THE SEWING MACHINE

Directions: Below and on the following page are pictures of the sewing machine you saw in **Handout 1.** Identify parts of the machine by writing the name of the part on the line next to its corresponding letter.

PART I



A. ____________________

B. ____________________

C. ____________________

D. ____________________

E. ____________________

F. ____________________

G. ____________________

H. ____________________

I. ____________________

J. ____________________

K. ____________________

L. ____________________

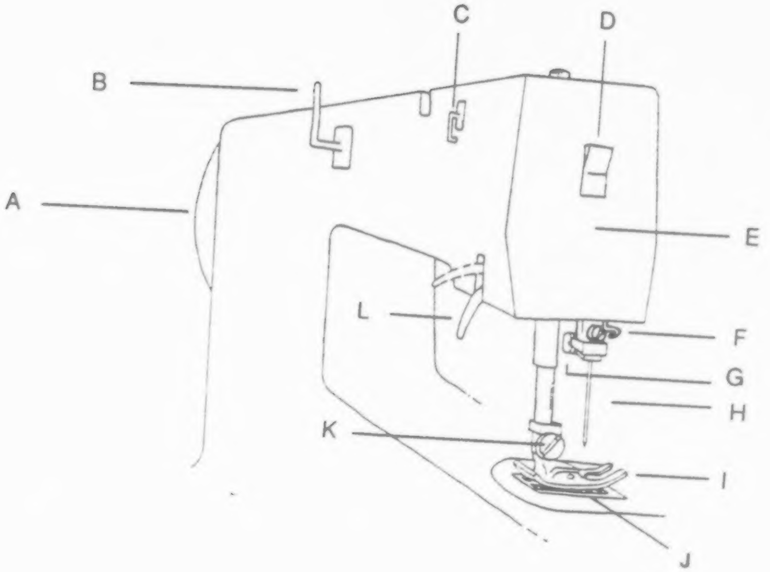
M. ____________________

N. ____________________

O. ____________________

P. ____________________

PART II


C
D
B
A
E
L
F
G
H
K
I
J

A. ______________________________

B. ______________________________

C. ______________________________

D. ______________________________

E. ______________________________

F. ______________________________

G. ______________________________

H. ______________________________

I. ______________________________

J. ______________________________

K. ______________________________

L. ______________________________

ADJUSTING THE HOME SEWING MACHINE

UNIT II

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET 1

1. Tension
2. Cams
3. Zigzag
4. Hook race
5. Backstitch
6. Head
7. Pressure
8. Needle
9. Throat plate
10. Bed
11. Presser foot
12. Handwheel
13. Bobbin case
14. Straight stitch
15. Feed dog

ASSIGNMENT SHEET 2

Part I

A. Throat plate
B. Power/light switch
C. Pressure control
D. Bobbin winder tension disc/bracket
E. Bobbin spindle
F. Bobbin winder stop latch
G. Stitch width selector
H. Needle position selector
I. Handwheel
J. Buttonhole dial
K. Reverse control/Stitch length selector
L. Slide plate
M. Thread guide
N. Needle clamp
O. Take-up lever
P. Tension indicator

Part II

A. Handwheel
B. Spool pin
C. Thread guide
D. Power switch
E. Face plate
F. Thread guide
G. Needle clamp
H. Needle
I. Presser foot
J. Feed dog
K. Presser foot screw/clamp
L. Presser foot lifter

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 1--CLEAN AND OIL THE SEWING MACHINE

Materials and equipment:

Sewing machine and machine manual
Small screwdriver
Small lint brush
Clean, soft cloth
Mild soapy water
Paper towels
Sewing machine oil
Thread and fabric

Steps of procedure:

(**CAUTION:** Always unplug the machine from the electrical outlet before servicing it.)

1. Open/remove all sliding or snap-in plates and covers.

2. Remove the following as applicable:

   a. Needle
   b. Presser foot
   c. Thread
   d. Bobbin
   e. Bobbin case
   f. Hook race/shuttle

3. With upward strokes, use a soft cloth to clean:

   a. Thread guides
   b. Take-up lever
   c. Tension discs
   d. Needle bar
   e. Presser bar
   f. Machine head and bed
   g. All removed parts

4. Clean the machine surface, if necessary. Use mild soap and water.

5. Remove any lint or thread ends from bobbin hook race with lint brush.

6. Apply one drop of machine oil in each oiling point indicated in the machine manual.

7. Re-assemble machine.

8. Plug sewing machine into electrical outlet.

9. Thread machine.

10. On a scrap of fabric, sew a few rows of stitches to absorb any excess oil.

11. Use a paper towel to wipe any excess oil from machine surface.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 2--CHANGE SEWING MACHINE NEEDLE

Materials and equipment:

Sewing machine and manual
New sewing machine needle
Screwdriver (if required)

Steps of procedure:

1. Turn machine off.

2. Raise needle to highest point by turning handwheel toward you.

3. Remove old needle by loosening the needle clamp screw. (Do not unscrew completely. Screw may fall out and become lost.)

4. Push new needle into clamp as far as possible. Check manual for position of flat side of needle.

5. Tighten needle clamp screw.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 3--WIND, INSERT, AND THREAD BOBBIN

Materials and equipment:

Sewing machine and manual
Empty bobbin
Thread
Bobbin case

Steps of procedure:

Wind bobbin:

1. To wind bobbin, loosen the clutch release to keep the needle stationary.
2. Place spool of thread on spool pin.
3. Lead thread through necessary thread guides.
4. Secure thread end to bobbin. Thread through bobbin hole from inside to outside or manually wind thread several times around the bobbin.
5. Place bobbin on bobbin winder and push clamp into place to hold bobbin firmly.
6. Hold thread tail and press speed controller to fill the bobbin with thread. Hold thread until the tail breaks off in your hand.
7. Cut thread when bobbin is wound to the desired amount or when it stops automatically.
8. Remove bobbin.
9. Retighten clutch.

Thread and insert bobbin:

1. Raise presser foot. Raise needle.
2. If bobbin case is removable:
    a. Place bobbin into case with bobbin turning in a **clockwise direction.**
    b. Hold the case and draw the thread through the slot in the case. Then draw it under the tension spring.
    c. Hold the case by the hinged latch with thumb and forefinger. (The extension arm should be directed up.) Place bobbin case into the hook race/shuttle.
    d. Pull on the end of thread.
    e. Close bobbin case cover.

3. If bobbin case is stationary:

   a. Open slide plate.
   b. Pull 5" of thread from bobbin and place it in the bobbin case so that the bobbin unwinds in a **counterclockwise** direction.
   c. Hold bobbin in place and guide thread through notches on the rim of the bobbin case.
   d. Hold thread on outside and close the slide plate.

4. If machine is already threaded, turn handwheel toward you until needle thread brings up the bobbin thread.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 4--THREAD THE SEWING MACHINE

Materials and equipment:

Sewing machine with threaded bobbin case
Machine manual
Thread
Shears

Steps of procedure:

1. Read the directions for threading your machine in the manual.

   (NOTE: If you do not have a manual for your machine, go to a store that sells and/or services your particular machine. If they cannot help you, write to the company to ask for a manual. Include the model and serial number of your machine.)

(NOTE: The following are general rules for threading a machine. Follow the directions in your machine manual.)

2. Place a spool of thread on spool pin.
3. Guide thread through any upper thread guides.
4. Secure thread between tension discs, hook, and/or check spring.
5. Lead thread through take-up lever.
6. Guide thread through any lower thread guides.
7. Thread needle from the side facing the last thread guide, pulling 4" of thread through the eye.
8. Hold the end of upper thread and turn the handwheel one complete turn.
9. Pull the upper thread to draw up bobbin thread loop, pull up the loop with finger, and free the end of the bobbin thread.
10. Guide both threads under the presser foot and pull over to the right.
11. Clip thread ends if necessary.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 5--ADJUST PRESSER FOOT PRESSURE

Materials and equipment:

Threaded sewing machine and machine manual
Heavyweight fabric scraps
Lightweight fabric scraps

Steps of procedure:

1. Place two layers of fabric under presser foot. Lower presser foot.

2a. If control is a dial, turn it toward:

   a. "+", a higher number, or "maximum" to increase the pressure for a heavyweight fabric.

   b. "-", a lower number, or "minimum" to decrease the pressure for a lightweight fabric.

2b. If control is a tension spring:

   a. Press push bar down to increase the pressure.

   b. Press the ring or "collar" that surrounds the push bar to release the pressure.

2c. If control is a screw-type regulator:

   a. Turn clockwise to increase pressure.
   b. Turn counterclockwise to decrease pressure.
   c. Press the speed controller and test the pressure.
   d. Adjust if necessary.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 6--ADJUST STITCH LENGTH

Materials and equipment:

Threaded sewing machine with stitch length regulator
Machine manual
Fabric

Steps of procedure:

1. Test stitch by sewing two layers of fabric together; determine if stitch length is appropriate for type of sewing and fabric.

2. To adjust:

   a. Raise needle to its highest position and raise presser foot.
   b. Increase stitch length.

   (NOTE: For the inch system, adjust to a lower number. For the metric system, adjust to a higher number.)

   OR

   c. Decrease stitch length.

   (NOTE: For the inch system, adjust to a higher number. For the metric system, adjust to a lower number.)

3. Test-stitch by sewing two layers of fabric together.

4. Repeat procedure, as necessary.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 7--ADJUST UPPER THREAD TENSION

Materials and equipment:

Threaded sewing machine with unbalanced tension
Machine manual
Fabric

(NOTE: Tension is balanced when the connecting link of each stitch is centered between the layers of fabric. To make checking easier, use white fabric. Thread machine and bobbin with two different, contrasting colors of thread.)

Steps of procedure:

1. Test-stitch by sewing across two layers of fabric.
2. Check tension. If bobbin thread shows on the top or upper thread shows on the underside of the fabric, tension is unbalanced. If the amount of contrasting colored thread showing on the top and underside of fabric is the same, tension is balanced.
3. To adjust:
    a. Lower the presser foot.
    b. If the link of the stitches falls toward the top (bobbin thread shows on top), decrease the upper tension by turning the dial to a lower number.
    c. If the link of the stitches falls toward the bottom (upper thread shows on the underside), increase the upper tension by turning the dial to a higher number.
4. Test-stitch by sewing across two layers of fabric.
5. Repeat procedure, as necessary.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 8--ADJUST LOWER THREAD TENSION

Materials and equipment:

Threaded sewing machine with unbalanced tension that cannot be corrected by upper tension adjustment
Machine manual
Fabric
Small screwdriver

Steps of procedure:

1. Test-stitch by sewing across two layers of fabric.

2. Examine the test stitching, distinguishing the top thread from the bottom thread. If bobbin case is built-in, **do not remove bobbin.**

   To adjust:

   a. If the link of the stitches falls toward the bottom layer of fabric, decrease the bobbin tension by turning tension spring screw counterclockwise.
   b. If the link of the stitches falls toward the top layer of fabric, increase the bobbin tension by turning the screw clockwise.

3. If bobbin case is removable, take it out.

   a. Hold bobbin case in left hand and pull thread with right hand to make sure thread slides out smoothly.
   b. Place bobbin case back into machine.

4. Rethread bobbin. Test stitches by sewing through two layers of fabric.

5. Repeat procedure, as necessary.

ADJUSTING THE HOME SEWING MACHINE

UNIT II

JOB SHEET 9--COMPARE HOME SEWING MACHINES

Directions: Investigate three different brands of sewing machines and gather decision-making information. Place an "X" in the boxes which correspond to the features of each machine. After you have the necessary information, state and explain your machine purchase decision in paragraph form in the section provided. Your final decision should be based on the ease and quality of performance.

Machine features	**Brand A:**	**Brand B:**	**Brand C:**
Suggested retail price			
Dealer services Warranty more than five years			
Classes offered			
Servicing			
Machine Easy-to-understand instructions			
Carrying case			
Jam proof			
Free-arm conversion			
One-piece metal casting			
Extension table			
Needle area lighted			
Safety power switch			
Marked needle plate			
Two motor speeds			
Bobbin case Vertical			
Horizontal			
Angle			
Easy to clean			
Features One-motion threading			
Built-in buttonholer			
Built-in stitches Zigzag			
Utility			

Machine features	**Brand A:**	**Brand B:**	**Brand C:**
Cams			
Throat plate Straight stitch			
Zigzag			
Reverse stitching			
Adjustable pressure			
Adjustable tension			
Feed dog lowers			
Automatic bobbin cut-off			
Snap-on presser feet			
Stitch balance			
Even feeding			
Additional features 1.			
2.			
3.			

EXPLANATION

Which sewing machine are you going to buy?

Why?

ADJUSTING THE HOME SEWING MACHINE

UNIT II TEST

Part I--Matching: Match each term with its definition by writing the letter(s) in the space provided.

a. Backstitch
b. Bobbin
c. Check spring
d. Tension disc
e. Needle clamp
ab. Pressure
ac. Straight stitch machine
ad. Tension
ae. Zigzag machine

___ 1. Reinforcing stitch made by reverse lever

___ 2. Term referring to thread tightness

___ 3. Metal part that holds the needle in place

___ 4. Machines that stitch forward and backward only

___ 5. Spool holding bottom thread supply

___ 6. Force placed on fabric during stitching

___ 7. Machine with many utility and decorative stitches

___ 8. Controls the tightness of the upper thread

Part II--Matching: Match each term with its definition by writing the letter(s) in the space provided.

a. Bed
b. Cam
c. Case
d. Feed dog
e. Head
ab. Bobbin hook race
ac. Presser foot
ad. Stitch length selector

___ 9. Machine part that loops the upper and lower threads together

___ 10. Small metal or rubber grid under the needle

___ 11. Total machine excluding base of sewing machine

___ 12. Holds fabric against the feed dog

___ 13. Determines distance the feed moves the fabric

___ 14. Part which controls stitch formation by its outer edge indentations

___ 15. Base of the sewing machine

Part III--Matching: Place an "a" in the blank next to the sewing machine accessories. Place a "b" in the blank if the item is not a sewing machine accessory.

___ 16. Spool holders

___ 17. Scissors

___ 18. Thread

___ 19. Bobbins

___ 20. Presser feet

___ 21. Light bulb

Part IV--Matching: Place an "a" in the blank next to the parts of the sewing machine that require lint and dirt removal. Place a "b" in the blank if the area does not require lint and dirt removal.

___ 22. Thread guides

___ 23. Light bulb area

___ 24. Needle and throat plate areas

___ 25. Tension discs

___ 26. Needle bar

___ 27. Presser bar

___ 28. Take-up lever

Part V--Matching: Place an "a" in the blank next to factors to consider when buying a sewing machine. Place a "b" in the blank if the item is not a factor to consider when buying a sewing machine.

___ 29. Look at two machines to make a comparison.

___ 30. Ask about warranty and guarantee.

___ 31. Rely on sales people's recommendations.

___ 32. Choose machine with the highest number of utility and decorative stitches.

___ 33. Read consumer research materials.

___ 34. Consider off-brand machines.

___ 35. Observe a demonstration of machine capabilities.

___ 36. Sew on the machine yourself.

Part VI--Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 37. Which machine part controls needle movement?

a. Flywheel
b. Speed controller
c. Reverse level
d. Handwheel
e. None of the above

___ 38. What do thread guides do?

a. Control upper thread tightness
b. Hold threads in place for stitching
c. Control lower thread tightness
d. Used to cut thread

___ 39. When should machine needles be changed?

a. Fabric weight changes
b. Needle dulls or bends
c. Threads break continually
d. All of the above

___ 40. Regular cotton-covered polyester thread, a size 11 or 70 ballpoint needle, and 12 stitches per inch would be appropriate for which of the following?

a. Heavy denim fabric
b. Topstitching
c. Silk blouse fabric
d. Upholstery fabric
e. None of the above

___ 41. Which describes presser foot pressure?

a. An upward force holding layers of fabric together
b. Helps keep the layers of fabric from sliding apart while being sewn
c. Controlled by the stitch length dial
d. None of the above

___ 42. What controls the distance the feed moves fabric?

a. Pressure control
b. Stitch width
c. Tension discs
d. Stitch length
e. None of the above

___ 43. What do weak, limp stitches indicate?

a. Too little tension
b. Too much tension
c. Damaged needle
d. Too little thread for stitches
e. None of the above

___ 44. What can incorrect thread tension cause?

a. Breaking threads
b. Puckered stitches
c. Puckered fabric
d. Loose stitches
e. All of the above

ADJUSTING THE HOME SEWING MACHINE

ANSWERS TO UNIT II TEST

Part I:

1. a
2. ad
3. e
4. ac
5. b
6. ab
7. ae
8. d

Part II:

9. ab
10. d
11. e
12. ac
13. ad
14. b
15. a

Part III:

16. a
17. b
18. b
19. a
20. a
21. a

Part IV:

22. a
23. b
24. a
25. a
26. a
27. a
28. a

Part V:

29. a
30. a
31. b
32. b
33. a
34. b
35. a
36. a

Part VI:

37. d
38. b
39. d
40. e
41. b
42. d
43. a
44. e

Custom Sewing

Overlock Machines
Unit III

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1					1-6, 37	
-	2					22, 24-25, 28-31, 33-36, 38	
-	3		1	1		32	
-	4					7-13	
-	5				1	14-21	
E3, E4	6				2	26	
E1	7	1	2		3	27	
E2	8		3		4		
-	9		4			23	

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

OVERLOCK MACHINES

UNIT III

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to explain the relationship between an overlock machine and a conventional sewing machine and will be able to operate the overlock machine. Competencies will be demonstrated by correctly performing the procedures outlined in the Assignment and Job Sheets and by scoring at least 85 percent on the Unit Test.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Based on the content outline, MATCH TERMS ASSOCIATED WITH THE OVERLOCK MACHINE TO CORRECT DEFINITIONS by achieving 100 percent accuracy on the Unit Test.
2. Based on the content outline, LIST WAYS OVERLOCK MACHINES ARE DIFFERENT FROM CONVENTIONAL SEWING MACHINES by achieving 100 percent accuracy on the Unit Test.
3. Based on the content outline and Handout 1, IDENTIFY BASIC OVERLOCK MACHINE PARTS by completing Assignment Sheet 1 and by achieving 100 percent accuracy on the Unit Test.
4. Based on the content outline, IDENTIFY STANDARD AND SPECIAL FEATURES OF OVERLOCK MACHINES by achieving 100 percent accuracy on the Unit Test.
5. Based on the content outline, COMPARE OVERLOCK MACHINES by completing Job Sheet 1 and by achieving 100 percent accuracy on the Unit Test.
6. Based on the content outline, REPLACE NEEDLES, CLEAN, AND OIL THE OVERLOCK MACHINE by completing Job Sheet 2 and by achieving 100 percent accuracy on the Unit Test.
7. Based on the content outline, Transparency Master 1, and Handout 2, THREAD AN OVERLOCK MACHINE by completing Job Sheet 3 and by achieving 100 percent accuracy on the Unit Test.
8. Based on the content outline and Handout 3, ADJUST TENSIONS ON THE OVERLOCK MACHINE by completing Job Sheet 4 and by achieving 100 percent accuracy on the Unit Test.
9. Based on the content outline, Handout 4, and manuals, DISCUSS OTHER OPERATIONS by achieving 100 percent accuracy on the Unit Test.

Custom Sewing

Overlock Machines
Unit III

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1					1-6, 37	
-	2					22, 24-25, 28-31, 33-36, 38	
-	3		1	1		32	
-	4					7-13	
-	5				1	14-21	
E3, E4	6				2	26	
E1	7	1	2		3	27	
E2	8		3		4		
-	9		4			23	

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

OVERLOCK MACHINES

UNIT III

UNIT OBJECTIVE

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SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Based on the content outline, MATCH TERMS ASSOCIATED WITH THE OVERLOCK MACHINE TO CORRECT DEFINITIONS by achieving 100 percent accuracy on the Unit Test.

2. Based on the content outline, LIST WAYS OVERLOCK MACHINES ARE DIFFERENT FROM CONVENTIONAL SEWING MACHINES by achieving 100 percent accuracy on the Unit Test.

3. Based on the content outline and Handout 1, IDENTIFY BASIC OVERLOCK MACHINE PARTS by completing Assignment Sheet 1 and by achieving 100 percent accuracy on the Unit Test.

4. Based on the content outline, IDENTIFY STANDARD AND SPECIAL FEATURES OF OVERLOCK MACHINES by achieving 100 percent accuracy on the Unit Test.

5. Based on the content outline, COMPARE OVERLOCK MACHINES by completing Job Sheet 1 and by achieving 100 percent accuracy on the Unit Test.

6. Based on the content outline, REPLACE NEEDLES, CLEAN, AND OIL THE OVERLOCK MACHINE by completing Job Sheet 2 and by achieving 100 percent accuracy on the Unit Test.

7. Based on the content outline, Transparency Master 1, and Handout 2, THREAD AN OVERLOCK MACHINE by completing Job Sheet 3 and by achieving 100 percent accuracy on the Unit Test.

8. Based on the content outline and Handout 3, ADJUST TENSIONS ON THE OVERLOCK MACHINE by completing Job Sheet 4 and by achieving 100 percent accuracy on the Unit Test.

9. Based on the content outline, Handout 4, and manuals, DISCUSS OTHER OPERATIONS by achieving 100 percent accuracy on the Unit Test.

OVERLOCK MACHINES

UNIT III

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Make transparencies.

C. Provide students with Objective Sheet.

D. Discuss Unit and Specific Objectives.

E. Provide students with Information Sheet.

F. Discuss the Information Sheet.

(NOTE: Use transparencies to enhance the information as needed.)

G. Provide students with Handouts, Assignment and/or Job Sheets.

1. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.
2. It is important that students be able to change knife blades, adjust stitch length and width, and attach special-function feet. However, the steps of procedure cannot be listed here because each overlock machine has different procedures. If there is an overlock machine in the classroom, use the instruction booklet for teaching these operations. If not, set up a demonstration in the classroom or at a local shop.

H. Integrate the following activities throughout the teaching of this unit:

1. Introduce the unit by explaining the terminology provided on the Information Sheet. (NOTE: Show examples when possible.)
2. Plan a field trip to a local store for an overlock demonstration.
3. Invite a professional tailor/seamstress to share his/her knowledge and expertise. Ask him/her to bring projects completed on an overlock machine.

I. Give test.

J. Evaluate test.

K. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Transparency Master

   1. TM 1--A "Quickie" Thread Change

F. Handouts

   1. HO 1--Overlock Machine Parts
   1. HO 2--Helpful Hints for Successful Serging
   3. HO 3--Stitch Tension
   2. HO 4--More Hints for Successful Serging

G. Assignment Sheet

   1. AS 1--Identify Parts of the Overlock Machine

H. Answers to Assignment Sheet

I. Job Sheets

   1. JS 1--Compare Overlock Sewing Machines
   2. JS 2--Replace Needles, Clean, and Oil the Machine
   3. JS 3--Thread the Overlock Machine
   4. JS 4--Adjust the Tension

J. Unit Test

K. Answers to Unit Test

RESOURCES

(NOTE: Also see Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

A. Brown, Gail, and Pati Palmer. Sewing with Sergers: The Complete Handbook for Overlock Sewing. Palmer-Pletsch, 1985.

B. Koontz, Pat Morris. "So Sew: New High Tech Equipment Saves Time, Works Wonders." Tulsa World 14 April 1986.

C. Overlock machine instruction manual (as appropriate).

OVERLOCK MACHINES

UNIT III

INFORMATION SHEET

(NOTE: Overlock sewing machines are changing the whole concept of home sewing. These small machines, copied from industrial sewing machines, are sometimes called **sergers.** They machine stitch, trim, and overcast all in one operation, thereby enormously reducing the time and effort required to make some sewing projects [**HO 2 and 4**].)

I. Terms and definitions

(Objective 1)

A. Compressed air--used to remove dust and lint from machine; available in cans at sewing and fabric stores

B. Conventional machine--multi-purpose sewing machine designed to perform utility and decorative stitching

C. Feed dogs--the teeth in a sewing machine or overlock machine, located below the presser foot, which move the fabric through the machine under the needle

D. Lockstitch--stitch formed by a needle thread and a bobbin thread, as on a conventional sewing machine

E. Looper--an arm in the machine that makes a loop with its thread. The looper threads combine with the needle threads to make the stitches.

F. Overlock machine stitch--made with three or four threads; used to sew seams and simultaneously finish seam allowances

G. Overlock stitch--made with two threads on a conventional sewing machine; used to finish seam allowances and edges, not to sew seams

H. Seam sealant--liquid used to secure the end of a seam

I. Serger--another name for an overlock machine

J. Stitch finger--a small bar that holds the stitches while they are being formed and keeps them from pulling the fabric in at the edge

II. Differences of an overlock machine

(Objective 2)

A. An overlock machine has a knife blade that trims the seam allowances just before they are stitched.

B. An overlock machine has **loopers**, not bobbins.

C. An overlock machine stitch is formed on a stitch finger that is between the fabric and the threads. It holds the thread until the entire stitch is formed.

D. An overlock machine uses two to five threads at one time.

E. An overlock machine cannot sew lockstitches.

F. An overlock machine feeds two layers of fabric perfectly with even tension on the top and bottom.

G. Feed dogs on an overlock machine are longer and catch the fabric as it approaches the presser foot. Lifting the presser foot is usually not necessary.

H. An overlock machine will not jam when forming stitches without fabric. The thread chain should be held behind the presser foot when starting to sew.

I. An overlock machine stitches at a speed of 1300 to 1500 stitches per minute, depending on the machine. Conventional machines stitch at 900 to 1100 stitches per minute, depending on the machine.

J. An overlock machine is a companion to a conventional machine. It does not replace it. The overlock machine stitches on the edge only. It will not install zippers, make buttonholes, top stitch, or perform many other normal and necessary sewing steps. It is, however, a quick and easy tool for sewing and finishing a raw edge in a neat and professional way. It can make many sewing tasks faster and easier.

III. Parts of the overlock machine

(Objective 3; HO 1; AS 1)

(NOTE: Different brands and models of overlock machines have different features, which are located in different places on the machine. **Handout 1** is a "generic" overlock machine intended to help identify some of these features.)

A. Telescoping thread guide stand

B. Spool rods

C. Pressure regulator

D. Thread guides

E. Tension discs and knobs for needle threads

F. Tension disc and knob for upper looper

G. Tension disc and knob for lower looper

H. Needle or needles (depends on model)

I. Presser foot lifter

J. Presser foot

K. Throat plate

L. Upper knife

M. Handwheel

N. Front cover

O. Side cover

P. Suction cups

IV. Features of overlock machines

(Objective 4)

A. Types

1. Two-thread--overcasts edge stitches only; does not sew seams
2. Three-thread--stitches seam, overcasts edge. Some convert to a two-thread.
3. Four-thread--stitches seam, has a second row of stitches for reinforcement, and overcasts edge. Some convert to a three-thread; some also convert to a two-thread.
4. Five-thread--sews an additional straight seam to the left of the overlock. Converts to four-, three-, and five- thread.

B. Standard features found on nearly all models

1. Stitch finger
2. Tension regulators
3. Presser foot pressure regulators
4. Stitch length regulator
5. Stitch width regulator
6. Knife blade guard
7. Needles (conventional or industrial)
8. Handwheel
9. Presser foot lifter
10. Color-coded threading guides
11. Upper and lower knife blades
12. Warranty

C. Special features found only on some models

1. Built-in sewing lamp
2. Free-arm capability
3. Built-in accessory box
4. Elastic application foot
5. Carrying handle

6. Attachable trash container
7. Tape sewing device

V. Deciding which overlock machine to purchase

(Objective 5; JS 1)

A. Get a demonstration from the dealer.

B. Bring your own fabrics to sew on the machine.

C. Know your dealer.

1. Some dealers offer guide lessons with the machine.
2. Some dealers are available to help with problems in using and operating the machine.
3. Some dealers offer repair and/or maintenance service.

D. Compare ease of threading.

E. Compare ease of adjusting tensions.

F. Compare ease of adjusting for nonstandard stitches.

1. Narrow rolled hem
2. Invisible blind hem
3. Flat lock decorative stitch

VI. Replacing needles, cleaning, and oiling

(Objective 6; JS 2)

(NOTE: Overlock machines generally need cleaning and oiling more often than conventional sewing machines because they run much faster and collect so much lint from trimming the seams.)

A. Change overlock machine needles

1. Unthread needle.
2. Using tiny screwdriver (usually provided in tool kit with machine), loosen needle clamp on needle bar. Turn screw counterclockwise. **Do not take screw all the way out.**
3. Pull needle out (if it does not fall out). Use tweezers to retrieve needle.
4. Insert new needle with the groove facing toward you. Be sure that the needle is facing the correct direction. Push the needle up as far as it will go and tighten the screw with the tiny screwdriver.

B. Unplug the machine from the electrical outlet.

C. Open and remove all sliding/snap-on plates and covers.

D. Remove all needles, threads, presser feet, and knives.

E. With compressed air and/or a lint brush, clean:

    1. Thread guides
    2. Take-up lever
    3. Tension discs
    4. Needle bar
    5. Presser bar

F. Oil as indicated in machine instructions.

G. Reassemble all parts.

H. Wipe off machine surfaces with a cloth and mild soap.

I. Plug in machine.

J. Reattach needles, presser feet, etc.

K. Rethread machine.

L. Test on scrap fabric.

M. Be sure all excess oil is removed.

VII. Threading the machine

(Objective 7; TM 1; HO 2; JS 3)

A. For practice threading, use a different color of thread on each spool.

B. Most overlock machines thread from left to right, beginning with the lower looper, which is the most difficult, then the upper looper, and then the needle or needles.

C. Some machines have the threading guide printed on the machine for quick reference.

D. "Quickie" thread change:

    1. Clip threads near the spool--do not unthread the machine.
    2. Replace with new spools in desired colors.
    3. Tie ends of old and new threads together tightly in a flat knot. Trim ends.
    4. Raise presser foot and needle to highest position.
    5. Pull threads through the machine until the knot just reaches the hole in the needle.
    6. Rethread the needle.
    7. Turn handwheel to check stitch or try on scrap fabric.

VIII. Balancing thread tension

(Objective 8; HO 3; JS 4)

A. Knobs turn clockwise (right) to tighten and counterclockwise to loosen.

B. Begin with the knobs set at the center of the standard setting for the type of thread and fabric being used.

C. Sew a sample seam over two layers of fabric and examine it (using tweezers) to determine which threads need balancing.

D. Make small adjustments to knobs and test the results with each adjustment.

E. If threads are badly out of adjustment, or if adjusting the knobs does not help, check that the threading is correct. Also check that the threads are caught in the tension knobs. Incorrect threading may show up as badly balanced tension.

IX. Other operations

(Objective 9; HO 4)

A. Chain off stitches.

1. After the seam is stitched, continue to run machine until a chain of about 6" is made.
2. With machine running, bring fabric to front of machine. Place thread chain over or under presser foot so that knives cut thread chain.
3. Clip chain thread so that a 2" chain remains with fabric and 4" remains in the machine.

OR

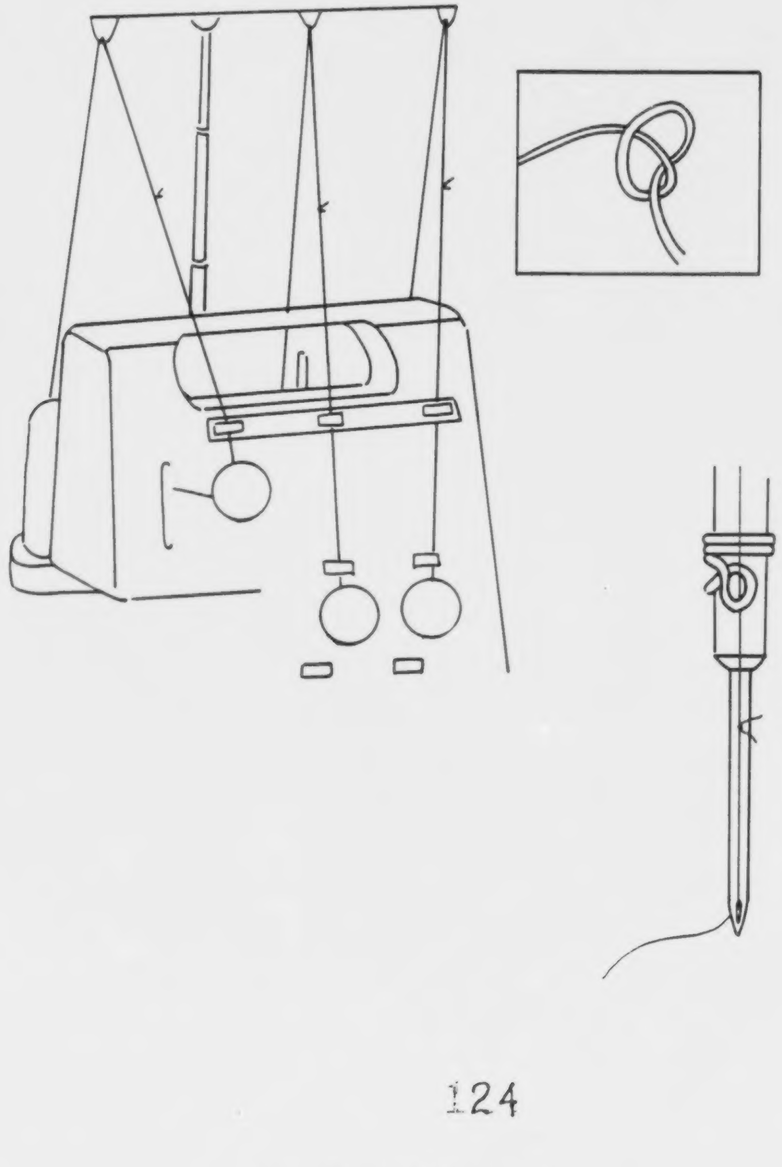
4. Thread chain on large needle and pull through several stitches at end of seam.
5. If desired, put a small amount of seam sealant at end of seam.

B. Change knife blades, adjust stitch length and width, and attach special-function feet.

(NOTE: While it is important to be able to perform these operations, the steps of procedure cannot be listed here because each overlock machine has different procedures. If there is an overlock machine in the classroom, use the instruction booklet for these operations.)

TM 1

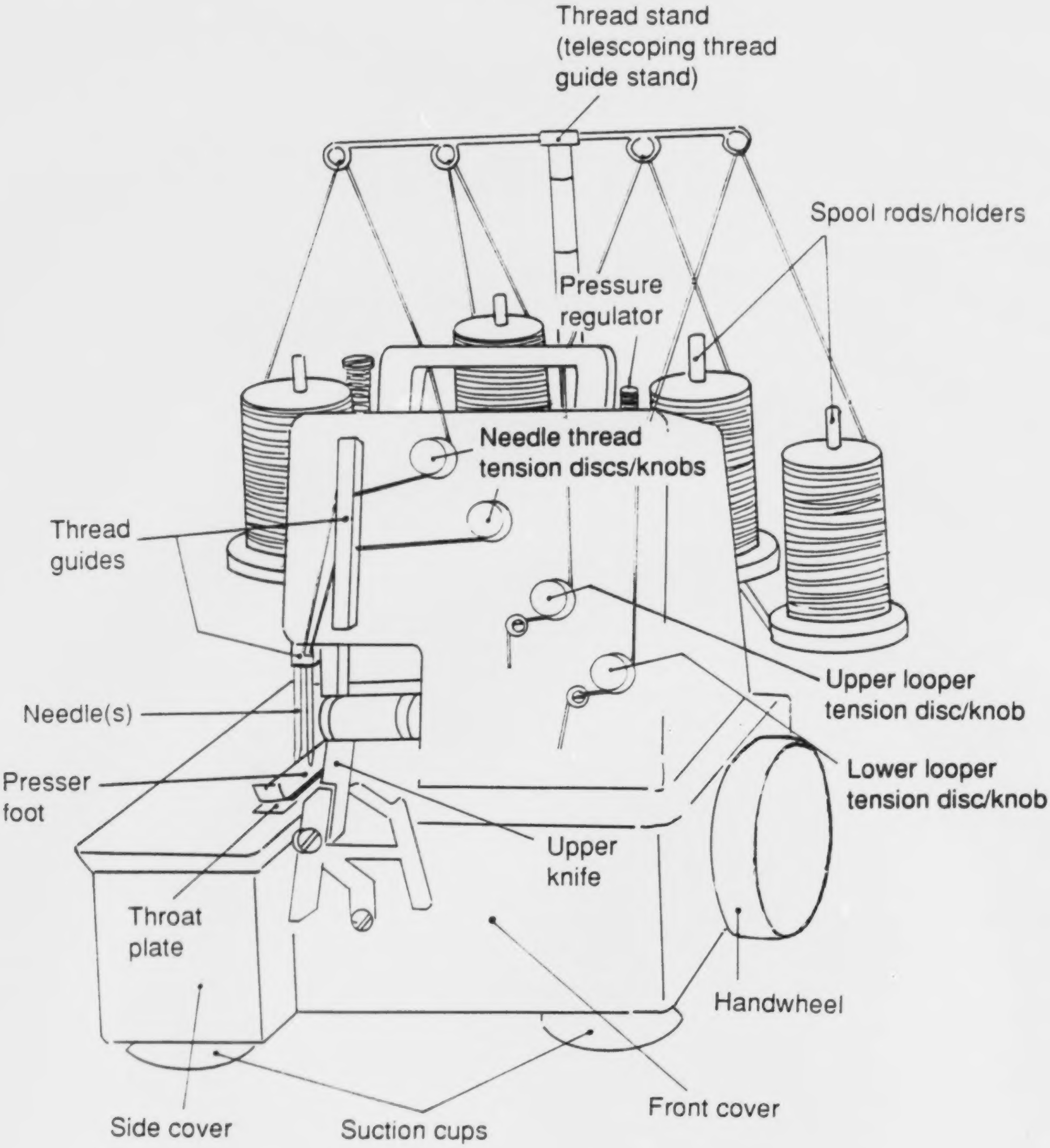
A "Quickie" Thread Change



OVERLOCK MACHINES

UNIT III

HANDOUT 1--OVERLOCK MACHINE PARTS


Thread stand (telescoping thread guide stand)
Spool rods/holders
Pressure regulator
Needle thread tension discs/knobs
Thread guides
Upper looper tension disc/knob
Needle(s)
Lower looper tension disc/knob
Presser foot
Upper knife
Throat plate
Handwheel
Front cover
Side cover
Suction cups

OVERLOCK MACHINES

UNIT III

HANDOUT 2--HELPFUL HINTS FOR SUCCESSFUL SERGING

1. Before adjusting tensions, always check for proper threading. If threads are not caught in the thread guides, it will appear that the tensions need adjustment.

2. When sewing with upper knife blade in "up" position, the edge of fabric must not extend beyond the edge of the throat plate.

3. Tension adjustments for three-thread or two-thread sewing will vary according to the type and thickness of fabric to be sewn and/or weight of thread being used. Adjust any or all tension knobs until ideal stitches are obtained.

4. After threading machine or trying out new threads, lower the presser foot and run the machine to check if threads are looping. Then test on fabric.

5. When threading the machine, pull the threads securely through the tension discs.

6. Do not pull fabric from behind the presser foot. Allow the machine to feed the fabric. Guide the fabric in front of the presser foot.

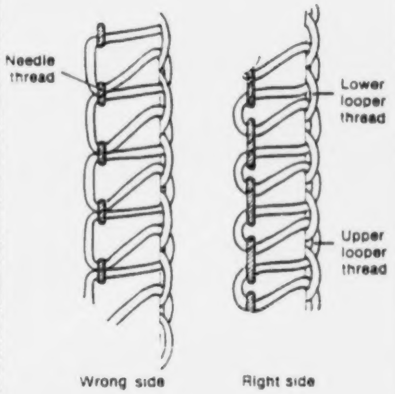
7. When placing cone thread on the spool stand, support the stand from underneath to prevent bending the metal stand plate.

OVERLOCK MACHINES

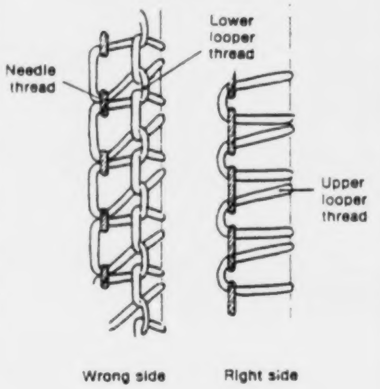
UNIT III

HANDOUT 3--STITCH TENSION

Ideal seams

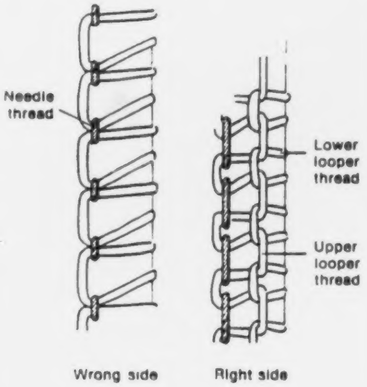

Needle thread
Lower looper thread
Upper looper thread
Wrong side
Right side

When upper looper thread laps round over the wrong side


Lower looper thread
Needle thread
Upper looper thread
Wrong side
Right side

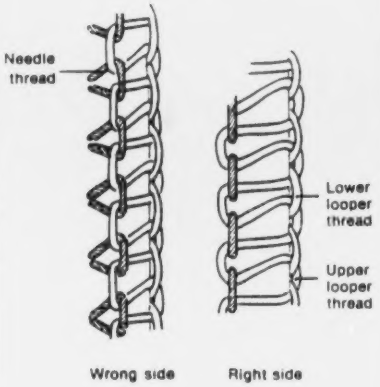
Tighten upper looper thread tension or loosen lower looper thread tension.

When lower looper thread laps round over the right side


Needle thread
Lower looper thread
Upper looper thread
Wrong side
Right side

Tighten lower looper thread tension or loosen upper looper thread tension.

When needle thread loosens


Needle thread
Lower looper thread
Upper looper thread
Wrong side
Right side

Tighten needle thread tension or loosen both upper looper thread tension and lower looper thread tension.

Credit: Operator's Guide (Serger Model 14U64A). Singer Sewing Co., 200 Metroplex Dr., Edison, NJ 08818.

OVERLOCK MACHINES

UNIT III

HANDOUT 4--MORE HINTS FOR SUCCESSFUL SERGING

Problem	**Solutions**
Skipped stitches	• Replace a bent, dull, or damaged needle. • Thread correctly through all guides and eyes. (Thread can easily come out of the open thread guides). • Change needle size. • Insert needle correctly. • Increase pressure for heavier fabrics.
Puckered fabric	• Loosen thread tension (lightweight fabrics). • Lighten foot pressure (lightweight fabrics). • Thread correctly. • Shorten stitch length.
Excessive stretching	• Lighten foot pressure. • Lengthen stitch. • Stabilize edge with interfacing, facings, or by serging over cording or ribbon. • Serge in from the edge, trimming off at least 1/4". • Be careful not to stretch fabric as you sew.
Irregular stitches	• Adjust tensions. • Thread correctly. • Replace with a new or different sized needle. • Check needle position. • Change to the correct sized needle for thread or fabric.
Fabric doesn't feed well	• Lengthen stitch. • Increase or decrease foot pressure, depending on fabric. • Clean lint out of feed dog.
Thread breaks	• Check for thread out of guides or for tangling. • Loosen tension. • Release thread if caught in spool notch. • Insert needle correctly. • Change to a new or a different sized needle.
Needle breaks	• Change to a new needle. • Insert needle correctly. • Change to a larger needle. • Avoid excessive pulling of fabric while serging.

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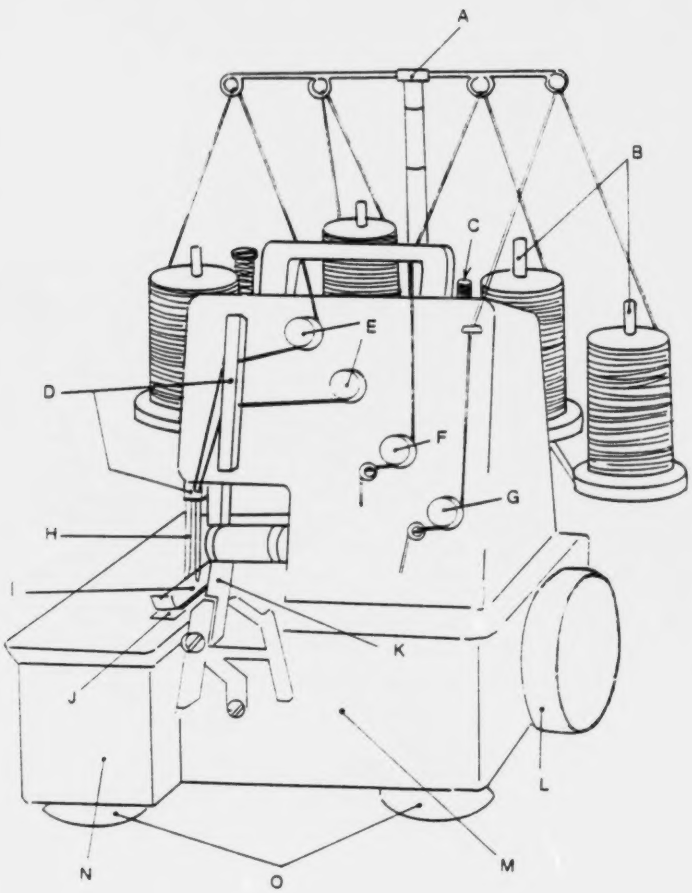
Machine jams	• Pull thread tails to the back as you begin to serge. • Make sure fabric trimmings fall away from, not into, serger. • Lengthen stitch, especially if using heavy threads. • Close protective front cover while serging. • Serge fewer layers of fabric.
Trimmed edge is ragged	• Reset knife blades correctly. • Change to a new blade.
Machine sews loudly	• Oil and clean machine. • Change to a new, correct sized needle for fabric or thread. • Consult your dealer if problem persists.

OVERLOCK MACHINES

UNIT III

ASSIGNMENT SHEET 1--IDENTIFY PARTS OF THE OVERLOCK MACHINE

Directions: Below is a picture of the overlock machine you saw in **Handout 1.** The lines with letters in front of them represent some of the major parts of the overlock machine that you should know. Write the name of the part on the line next to its letter.



A. ______________________________

B. ______________________________

C. ______________________________

D. ______________________________

E. ______________________________

F. ______________________________

G. ______________________________

H. ______________________________

I. ______________________________

J. ______________________________

K. ______________________________

L. ______________________________

M. ______________________________

N. ______________________________

O. ______________________________

OVERLOCK MACHINES

UNIT III

ANSWERS TO ASSIGNMENT SHEET

ASSIGNMENT SHEET 1

A. Thread stand or telescoping thread guide stand
B. Spool rods or spool holders
C. Pressure regulator
D. Thread guides
E. Needle thread tension discs/knobs
F. Upper looper tension disc/knob
G. Lower looper tension disc/knob
H. Needle(s)
I. Presser foot
J. Throat plate
K. Upper knife
L. Handwheel
M. Front cover
N. Side cover
O. Suction cups

OVERLOCK MACHINES

UNIT III

JOB SHEET 1--COMPARE OVERLOCK SEWING MACHINES

Directions: Investigate three different brands of overlock machines. Place an "X" in the boxes which correspond to the features of each machine. After you have the necessary information, state and explain your overlock machine purchase decision in paragraph form in the section provided. Your final decision should be based on the ease and quality of performance.

Machine features	Brands		
Type Number of threads: Convertible to:			
Ease/difficulty of threading: color-coded paths?			
Ease/difficulty of adjusting tension: color-coded or numbered?			
Does the presser foot swing out of the way for threading?			
Can the knife be disengaged while sewing?			
Is the stitch length easy to adjust?			
Is the stitch width easy to adjust?			
Is there a waste collector?			
Is there a presser foot pressure regulator?			
Are there finger guards?			
Are industrial or conventional needles used?			
Is there a built-in light?			
Does it have a free-arm capability?			
Is the rolled edge easy to stitch? Is a conversion foot included or extra? (cost?)			

Machine features	Brands		
Is the blind hem easy to stitch? Is the conversion foot included or extra? (cost?)			
Is there an elastic applicator foot included or extra? (cost?)			
Is there a tape sewing foot included or extra? (cost?)			
Is there a power switch to turn the machine off?			
Is there a carrying handle?			
Cost of machine			
Warranty length			
Dealer support: Good reputation? Lessons included? Repair/maintenance service available?			

EXPLANATION

Which overlock machine are you going to buy?

Why?

OVERLOCK MACHINES

UNIT III

JOB SHEET 2--REPLACE NEEDLES, CLEAN, AND OIL THE MACHINE

Materials and equipment:

Overlock machine
New needles for each position
Sewing machine oil
Lint brush
Clean cloth

Steps of procedure:

1. Unplug the machine.
2. Remove old needles and any other removable parts.
3. Clean with lint brush and compressed air.
4. Oil as needed.
5. Insert new needles and reassemble other machine parts.
6. Reassemble machine.
7. Wipe off excess oil.
8. Plug in machine.
9. Reattach needles, etc.
10. Rethread the machine.
11. Test on scrap fabric.

OVERLOCK MACHINES

UNIT III

JOB SHEET 3--THREAD THE OVERLOCK MACHINE

Materials and equipment:

Overlock machine
Instruction book
Thread (preferably cone thread)

Steps of procedure:

1. Follow the instructions in the machine manual for threading the machine.
2. Check threading by sewing on a scrap of fabric.
3. Adjust tension if necessary.
4. Change to new colors:
    a. Clip thread near spool.
    b. Replace with new spools.
    c. Tie ends of new and old threads together tightly. Trim ends.
    d. Raise presser foot and needle.
    e. Pull threads through.
    f. Cut knot before it reaches needle eye.
    g. Rethread needle.
    h. Check threading by sewing on a scrap of fabric.

OVERLOCK MACHINES

UNIT III

JOB SHEET 4--ADJUST THE TENSION

Materials and equipment:

Overlock machine
Instruction book and/or Handout 3
Fabric scraps

Steps of procedure:

1. Set knobs at center of standard setting.
2. Sew a sample over two layers of fabric.
3. Compare sample stitch with HO 3 and/or instruction book.
4. Make small adjustment and retest. (Consult instruction book if necessary.)
5. Repeat steps 3 and 4 until sample stitch is acceptable. If adjusting tension knobs does not help, check threading.

OVERLOCK MACHINES

UNIT III TEST

Part I--Matching: Match each term with the descriptive phrase by writing the letter(s) in the space provided.

___ 1. Used to finish raw edges; made with two threads

___ 2. The teeth in a sewing machine or overlock machine, located below the presser foot, which move the fabric through the machine under the needle

___ 3. Another name for an overlock machine

___ 4. Small bar that holds the stitches while they are being formed and keeps them from pulling the fabric in at the edge

___ 5. Stitch formed by a needle thread and a bobbin thread, as on a conventional sewing machine

___ 6. An arm in the machine that makes a loop with its thread

a. Serger

b. Looper

c. Overlock stitch

d. Stitch finger

e. Lockstitch

ab. Feed dog

ac. Seam sealant

Part II--Matching: For the features listed below, place S in the blank if the feature is **standard** on most overlock machines and an E in the blank if the feature is an **extra** or appears only on some machines.

___ 7. Handwheel

___ 8. Stitch length regulator

___ 9. Built-in sewing lamp

___ 10. Free-arm capability

___ 11. Knife blade guard

___ 12. Elastic application foot

___ 13. Carrying handle

Part II--True/False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 14. Look at two machines (or more) and compare.

___ 15. Rely on the recommendations of salespeople.

___ 16. Compare ease of adjusting tensions.

___ 17. Ask about warranty and service.

___ 18. Consider an off-brand or cheaper machine.

___ 19. Ask about dealer-offered lessons on using the machine.

___ 20. Observe demonstration of machine's capabilities.

___ 21. Sew on the machine yourself.

Part III--Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 22. How many threads do overlock machines have?

a. 2 threads
b. 3 threads
c. 4 threads
d. Any of the above

___ 23. Which is the correct procedure when chaining stitches at the end of a seam?

a. Leave 2" chain with fabric and 4" chain with machine.
b. Leave 3" chain with fabric and 3" chain with machine.
c. Leave 4" chain with fabric and 2" chain with machine.
d. Backstitches to secure chain in fabric.

___ 24. Which of the following does **NOT** apply to an overlock machine?

a. Loopers
b. Bobbins
c. Feed dogs
d. Knives

___ 25. What can an overlock machine do better than a standard sewing machine?

a. Baste
b. Trim and finish seams
c. Insert a zipper
d. Topstitch a pocket

___ 26. Why might overlock machines need cleaning more often than regular sewing machines?

a. They are harder to thread.
b. Dirt gets in more easily.
c. Trimming seams causes excess lint.
d. None of the above

___ 27. When threading an overlock machine, which of the following will simplify the task?

a. Use of different colored threads
b. Following the threading chart
c. Working from left to right
d. All of the above

Part V--Matching: Put a C for **conventional** sewing machine and an **A** for **overlock** sewing machine in the proper blanks.

___ 28. Buttonhole attachment

___ 29. No bobbin

___ 30. Bobbin

___ 31. Maximum of 900-1100 stitches per minute

___ 32. Up to five tension discs/knobs

___ 33. Sews lockstitches

___ 34. Stitch made with series of loopers

___ 35. Maximum of 1500 stitches per minute

___ 36. Knives trim excess fabric

___ 37. Performs three-step operation: seams, trims, and overcasts

___ 38. Threads formed on a stitch finger

OVERLOCK MACHINES

ANSWERS TO UNIT III TEST

Part I:

1. c
2. ab
3. a
4. d
5. e
6. b

Part II:

7. S
8. S
9. E
10. E
11. S
12. E
13. E

Part III:

14. T
15. F
16. T
17. T
18. F
19. T
20. T
21. T

Part IV:

22. d
23. a
24. b
25. b
26. c
27. d

Part V:

28. c
29. a
30. c
31. c
32. a
33. c
34. a
35. a
36. a
37. a
38. a

APPENDIX A

HELPFUL RESOURCES

★(NOTE: These resources are available for Missouri educators on free loan from Missouri Vocational Resource Center, 8 London Hall, Columbia, MO 65211 [800/392-7217].)

I. Books and Curriculum Guides

A. Belleau, Bonnie D. "Self Checking Lessons In Clothing Construction." Portland, ME: J. Weston Walch.

B. Brown, Gail, and Pati Palmer. Sewing with Sergers: The Complete Handbook for Overlock Sewing. Portland, OR: Palmer-Pletsch, 1985.

C. Butterick. Vogue Sewing. New York: Harper & Row, 1982.

D. Bystrom, Adoree Evans. The Tailoring Process: Custom & Simplified. Cincinnati: South-Western Pub. Co., 1985.

E. Cabrera, Roberto, and Patricia Flaherty Meyers. Classic Tailoring Techniques: A Construction Guide for Women's Wear. New York: Fairchild Publications, 1984.

F. Clothing Assistant. Lubbock, TX: Instructional Materials Center, University of Texas Press, 1983.

G. Davis, Ronald I. Men's Garments 1830-1900: A Guide to Pattern Cutting. London: Batsford, 1989.

H. Farmer, Bonnita M., and Lois M. Gotwals. Concepts of Fit: An Individualized Approach to Pattern Design. New York: Macmillan, 1982.

I. Gebbia, Anthony S., and Master Designer. Modern Method of Women's & Children's Garment Design: Measurement Charts, Pattern Drafting, Grading. Chicago: Master Designer, 1981.

J. Godfrey, Frank P. An International History of the Sewing Machine. London: R. Hale, 1982.

K. King, Rosalie Rosso. Textile Identification, Conservation, and Preservation. Park Ridge, NJ: Noyes Publications, 1985.

L. Levenson, Helene. Creating an Interior. Englewood Cliffs, NJ: Prentice-Hall, 1980.

M. Lyle, Dorothy C., and J. Brinkley. Contemporary Clothing. Peoria, IL: Bennett, 1983.

N. McCall Pattern Guide to Sewing Power. Dubuque, IA: Kendall-Hunt, 1983.

O. Neal, Mary. Custom Draperies In Interior Design. New York: Elsevier Science, 1982.

P. Singer Sewing Reference Library. Cy DeCosse Incorporated, 5900 Green Oak Drive, Minnetonka, MN 55343 (800/328-0590, ext. 725; 612/936-4700).

1. Clothing Care and Repair, 1986.
2. Creative Sewing Ideas, 1990.
3. Decorative Machine Stitching, 1990.
4. More Sewing for the Home, 1987.
5. Quilting by Machine, 1990.
6. Sewing Activewear, 1986.
7. Sewing Essentials, 1986.
8. Sewing for Children, 1988.
9. Sewing for Style, 1986.
10. Sewing for the Home, 1986.
11. Sewing Knits, 1991.
12. Sewing Lingerie, 1991.
13. Sewing Pants that Fit, 1989.
14. Sewing Projects for the Home, 1991.
15. Sewing Specialty Fabrics, 1986.
16. Sewing With an Overlock, 1989.
17. Tailoring, 1988.
18. The Perfect Fit, 1987.
19. Time Saving Sewing, 1987.

Q. Stamper, Anita A.; Sue Humphries Sharp; Linda B. Donnell. Evaluating Apparel Quality. New York: Fairchild Publications, 1986.

R. Sunset Books, ed. Curtains, Draperies, and Shades. Menlo Park, CA: Lane, 1981.

S. Vanderhoff, M. Clothes, Clues and Careers. Lexington, KY: Ginn (Xerox Corp.), 1981.

T. Weber, Jeanette. Clothing: Fashion, Fabrics, Construction. Mission Hills, CA: Glencoe Div. of Macmillian/McGraw-Hill, 1989.

★U. Westfall, Mary G. Successful Sewing. South Holland, IL: Goodheart-Wilcox, 1990.

V. Wyllie, Ethel. Today's Custom Tailoring. 3rd ed. Peoria, IL: McKnight Div. of Glencoe, 1987.

II. Leaflets

A. Simplicity Pattern Company, Inc., 901 Wayne Street, Niles, MN 49121-0099 (800/843-8089 to order teaching kit).

1. Action-Packed Sewing
2. Fabric Sewing Guide
3. Fasten It!
4. Fuss-Free Guide to Fitting Pants
5. Guide to Sewing for Children
6. Indispensable Interfacing
7. Metric's Sew Easy
8. Napped Fabric Know How

9. Sewing for Beginners
10. Sewing with Wool Jersey
11. Sewing Sheers and Laces
12. Sewing Synthetic Suedes and Leathers
13. Simple Pattern Adjustments
14. Tailoring Today

B. University of Missouri Extension Publications (Available from the University Extension Center in each county or from Extension Publications, 2800 Maguire, University of Missouri, Columbia, MO 65211 [314/882-7216]. Write for pricing details and complete catalog.)

1. ALTERATIONS

MP0545	Alterations for a Good Fit in Men's and Women's Apparel
GH0431	Narrowing Lapels and Collars

2. CLOTHING CARE

GH0134	Home Laundry: Getting the Results You Want
MP0663	Stain Removal from Washable Fabrics

3. CLOTHING CONSTRUCTION

GH0992	Building a Workable Wardrobe
GH0784	Clothing for Men and Women with Arthritis
GH0721	Good Fit in Men's and Women's Apparel
GH0635	Kids and Clothes
GH0711	Men's Wear I: Body Dimensions and Wardrobe Coordination
GH0712	Men's Wear II: Garment Fit, Quality and Care
GH0653	Selecting Clothing for Handicapped Children
GH0405	Use and Fit of a Pattern

4. DESIGN

GH0550-54	Designs for You: Parts I-V
GH0771	Dressing Slim

5. FABRICS AND TEXTILES

RP0174	Facts about Fabric Flammability

6. READY-MADES

GH0851	Insulated Outerwear: Fabrics and Fillings
GH0824	The Clothing Market Place: Look to the Label

7. HOME FURNISHINGS

GH2066	Care of Valuable Possessions, Furniture, Tapestries, Rugs, Textiles, Paintings, etc.
RP0243	Decorating with Fabric: Making Shades

RP0255	Decorating with Fabric: Making Curtains and Draperies
GH0981	Fabrics for the Home: Choosing Draperies
FO0069	How to Upholster Dining Room and Kitchen Chairs
EC0690	How to Upholster Chairs
EC0798	Make Your Own Chair Covers
EC0793	Make Your Own Draperies

III. Audiovisuals

A. Videos, booklets and catalog from Nancy's Notions, Ltd., 333 Beichl Avenue, PO Box 683, Beaver Dam, WI 53916-0683 (800/848-0392).

1. Appliqué: Basic to Creative, 1989. 60 min. (#SN-305)
2. Blazers and Vests--Beyond the Basics, 1990. 60 min. (#SN-325)
3. Busy Woman's Fitting Techniques, 1988. 60 min. (#SN-905)
4. Busy Woman's Sewing Combo, 1988. 120 min. (#SN-218)
5. Contemporary Serging, 1987. 60 min. (#SN-812)
6. Decorating on the Double, 1991. 60 min. (#SN-430)
7. Designer Wearables, 1991. 60 min. (#SN-525)
8. Elastics Update, 1991. 30 min. (#SN-535).
9. Fitting for Style, 1991. 60 min. (#SN-440)
10. Fuse, Press, Success! 1991. 60 min. (#SN-425)
11. Organizing Your Sewing Area, 1990. 30 min. (#SN-340)
12. Personalizing Patterns, 1990. 60 min. (#SN-335)
13. Plaid Pointers, 1991. 30 min. (#SN-445)
14. Quick Jackets, 1991. 60 min. (#SN-510)
15. Quick Napkin Creations, 1991. 30 min. (#SN-520)
16. Quilting Options, 1991. 60 min. (#SN-515)
17. Serge, Sew and Decorate with Fabric, 1989. 60 min. (#SN-310)
18. Serger Feet on the Go, 1991. 60 min. (#SN-540)
19. Sew an Heirloom, 1991. 60 min. (#SN-545)
20. Sew à la Art, 1990. 60 min. (#SN-410)
21. Sportswear--Serge It/Sew It, 1990. 60 min. (#SN-330)
22. Stitch-Again Wardrobe, 1991. 60 min. (#SN-530)
23. Thread to Feet--Untapped Ideas, 1990. 60 min. (#SR-320)

B. Pellon Teaching Aids and Literature Series. Available from Nancy's Notions, Ltd., 333 Beichl Avenue, PO Box 683, Beaver Dam, WI 53916-0683 (800/848-0392). Freudenberg Nonwovens, Pellon Division, 119 West 40th Street, New York, NY 10018 (800/833-0690).

1. Fibers, Fabrics and Function (video), 1991. 30 min.

C. Videos from Career Aids Div., Opportunities for Learning, 941 Hickory Lane, PO Box 8103, Mansfield, OH 44901-8103 (800/243-7116)

1. Sewing Video Series: Craft and Gifts to Sew; Sew a Wardrobe in a Weekend; Speed Sewing--10 Super Tips, 1989. 30 min. each. (#112918-HES)
2. Fashion Your Figure, 1988. 33 min., teacher's guide. (#100533-HES)

D. Videos by the Curriculum and Instructional Materials Center (CIMC), Oklahoma Department of Vocational and Technical Education, 1500 West Seventh Avenue, Stillwater, OK 74074-4364 (800/654-4502).

1. Fabrics and Textiles, 1988. 8:45 min. (#HE 7106)
★2. Personal Clothing Management: Unit V--Construction Techniques, 1986. 34 min. (HE video 10)
3. Personal Clothing Management: Unit VI--Altering Ready-to-Wear, 1986. 67 min. (#HE7023)

E. Videos from the Agricultural Communications Center, University of Idaho, Moscow, ID 83843-4196 (208/885-6436).

1. Sergers, The Basics, 1986. 23 min. (#294)
2. Sergers, Construction Methods, 1986. 28 min. (#295)
3. Serger Shopping, 1988. 18 min. (#518)

F. Filmstrips from McCalls Pattern Company, Box 9119, Manhattan, KS 66502-9990 (913/776-4041).

1. Birth of a Pattern, 1986. 20 min.
2. Focus on Fit, 1983. 22 min.

G. Videos from NASCO, 901 Janesville Avenue, Fort Atkinson, WI 53538 (800/558-9595)

1. Beginning Sewing Techniques, 1988. 30 min. (#WA11803H)
2. Sewing with Sergers--Basics, 1990. 60 min. (#WA12136H)

H. The Learning Seed, 330 Telser Road, Lake Zurich, IL 60047 (800/634-4941).

★1. Color in Clothing (HE video 73), 1991. 20 min.

2. What Everyone Should Know About Fabrics, Part I and II (filmstrips or still video), 1985. 27 min. (#73)

I. American Media Incorporated, 1454 30th St., W. Des Moines, IA 50265 (800/262-2557)

★1. Professional Presence (BOE video 57), 1989, 24 min.

IV. Computer Software

A. Orange Juice Software Systems, 338 South Arch Avenue, New Richmond, WI 54017 (715/246-3588)

1. Know Your Pattern (Apple 5 1/4" or 3 1/2" disks). (#HE2010)
2. The Pattern Layout Simulator (Apple 5 1/4" or 3 1/2" disk). (#HE3020)
3. Design Elements and Principles (Apple 5 1/4" disks). (#HE1090)
4. Techniques of Sewing Series (Apple 5 1/4" disks).
    a. Staystitching (#HE2030)
    b. Edgestitching (#HE2040)
    c. Gathers (#HE2050)

        d. Darts (#HE2060)

    5. Care for Your Wear (Apple 5 1/4" or 3 1/2" disks). (#HE8060) Combines interactive tutorial with reference guide.

B. The Learning Seed, 330 Telser Road, Lake Zurich, IL 60047 (800/634-4941).

    1. Clothing Quiz (IBM or Apple II). (#74)
    2. Fiber Basics for Clothing (IBM or Apple II). (#98)

V. Sewing Publications

(NOTE: Because subscription prices change, write or call for current information.)

A. Sew Business. Gralla Publications, 15400 Knoll Trail Drive, Dallas, TX 75248. Monthly trade newspaper magazine designed for fabric stores focusing on merchandising trends, new products coming on the market, and a fabric forecast.

B. Sew News. P.J.S. Publications, Inc., Box 1790, News Plaza, Peoria, IL 61656 (309/682-6626). Monthly newspaper on up-to-date sewing techniques, new machines and products, fashion news, and ads pertaining to every phase of sewing.

C. Silver Thimble. Valley Brook Enterprises, Inc., 311 Valley Brook Road, McMurray, PA 15317 (412/941-1360). Monthly sewing and fashion report geared to keep the home sewer up-to-date.

D. Sewing Update. Palmer/Pletsch Sewing Update, 2269 Chestnut St., #269, San Francisco, CA 94123 (415/931-7370). Bimonthly newsletter for fashion sewing.

E. The Needle's Eye Worldwide. Union Special Corp., 222 N. LaSalle St., Suite 900, Chicago, IL 60601-1079 (312/606-9500). Bimonthly.

APPENDIX B

GLOSSARY OF TERMS

Accordion pleats--very narrow pleats which are pressed along the entire length of the garment. The folds resemble an accordion.

Applique--small piece or pieces of fabric cut into shapes and applied by hand or machine on top of a background fabric for decoration

Apron--trim below the window sill

Armscye--armhole

Backstitch--reinforcement at the beginning and end of a seam done by stitching backwards for a few stitches

Baseboard--molding that extends up the wall from the floor

Balance--achieved when garment hangs at equal distances from the body on the right and left and on front and back

Basic pattern--fitted pattern with simple design lines, sleeves, skirt, bodice, and neckline facings; used to make a pattern that exactly fits the body; usually made in muslin (since muslin can be taken apart and used as a pattern)

Batting--sheet of (usually) polyester filling placed between the face and backing of quilts and some coverlets. Batting must be quilted or tied in place to keep it from bunching with wear and washing. Batting may also be made from wool, cotton, silk, or a combination of fibers.

Beading--narrow strip of open-work through which ribbon can be inserted; small beads applied singly or in groups to create a design

Bed--flat base of the machine which supports the head and houses the bobbin and bobbin case

Beeswax--used to strengthen thread and prevent snarling and snagging

Belt--strip of fabric (usually matching) which is placed at the waistline of a garment. It is usually either all fabric and tied, or a covered piece of stiffening with a buckle.

Belt carriers--self-fabric strips attached to waistband or side seam of garment to hold a belt in place

Belt loop--thread or fabric loop used to hold belt in place

Belting--stiff, ribbon-like banding used inside a waistline as a stay or covered with fabric and used outside as a belt

Bias binding--strip of fabric cut on the bias (45 degree angle) of the fabric to provide stretch and ease in application; used to finish an outside edge

Bias nonwoven interfacing--fabric that stretches in all directions

Binding--piece of fabric added to the garment/product to finish the outside edge

Blend--combination of at least two different fibers in one yarn (a blended fabric) or a fabric made from two or more different yarns (a combination fabric)

Blindstitch--hand- or machine stitch used for hemming and holding facings in place. This stitch is invisible (or almost invisible) on the outside of the fabric.

Blind-tucks--when the fold of each tuck touches or overlaps the next, covering the stitching line

Bobbin hook race/shuttle--circular piece of metal surrounding the bobbin that turns to catch the upper thread and the bobbin thread to form the stitch

Box pleats--two side pleats which turn away from each other

Braid--woven, novelty trim finished on both sides

Button--used to close a garment and to accent; comes in two types, sew-through and shank

Button foot--a small machine foot used to apply buttons

Cafe curtain--tiered curtain which can be shirred onto rods or made with pleated tops. It may be used in combination with a valance or decorator shade.

Cam--circular piece of metal or plastic, either built-in or inserted into the machine, that controls stitch formation by its outer edge indentations; used to make decorative stitches

Casing--tunnel at the top of a curtain; open at both ends so a curtain rod or pole can be inserted

Catchstitch--cross stitch used to hold raw edges in place securely; a stable and secure stitch used in areas where edges need to be flat; particularly good for heavy fabrics

Chevron--"V" pattern formed by sewing plaid or striped fabric on the bias and matching at seams

Circular ruffle--ruffle cut in a circle. Fullness is created when the inner curve of the circle is straightened.

Classic--traditional style that can stay in fashion for a very long time. Examples include the blazer jacket and blue jeans.

Clip--snips made into seam allowance, especially for inward curves. Do not use on curves which have strain such as crotch seams and armhole edges.

Collar fall--part of the collar which covers the collar stand

Collar roll line--foldline between the collar stand and the fall; the line on which the collar turns

Collar stand--section of a two-part collar that lies against the neck

Commercial pattern--fully developed fashion pattern which gives all pieces, layouts, and sewing instructions

Compatibility--having the same care qualities

Compressed air--used to remove dust and lint from machine; available in cans at sewing and fabric stores

Continuous bias--long, bias strip made from a square or rectangle of fabric

Continuous lap--single piece of fabric used for placket facing

Conventional machine--multi-purpose sewing machine designed to perform utility and decorative stitching

Convertible collar--may be worn open as a partial roll collar or closed as a standing collar with a fall

Cording--piece of cord covered with bias fabric and inserted between seams

Couture--sewing or needlework; the product of a dressmaker

Coverlet--spread, similar to a bedspread, which covers the top of the bed and extends only a little way down the mattress

Cuffs--wide hem made by turning the fabric back against the garment. On a sleeve, additional fabric may be added, finished, and then turned up or buttoned. On slacks, extra fabric in the length is turned up and tacked at the seams.

Curtain--window treatment, usually fabric shirred onto a rod, often with a heading

Dart or released tuck--tuck used to control fullness or shape. The fold is formed on the inside, stitched to a designated point, and then released.

Decorative stitches--fancy stitches made by hand or machine to decorate, finish, and/or add design

Design lines--silhouette of the garment resulting from the shapes, placement of parts, and placement of design details

Designer darts--darts which end about 1/2"-1" from the fullest part of the body or a body point

Directional cutting--cutting with the grain of the fabric; helps fabric maintain its original size and shape

Directional stitching--stitching with the grain of the fabric to prevent stretching or changing the shape of the seam area

Drapery--window treatment using a stiffening at the top, pleats, and special pins to attach to a drapery rod

Dress fabric interfacing--fabric such as lawn, muslin, batiste, taffeta, organdy, percale, unbleached muslin and some lining or underlining fabric; designed for use in garments, but sometimes used for interfacing

Drop--distance from the top of the mattress down the side to the edge of the coverlet or bedspread

Dropped shoulder--shoulder seam that is lowered to hang down over the top of the arm

Dust ruffle--bed treatment of fabric, either gathered or pleated, which extends from the box springs to the floor

Dye--substance added to produce or change the color

Ease--the amount of fullness added to body measurements to allow for body movement

Even plaid--plaid where the stripe arrangement is the same in both lengthwise and crosswise directions and, when folded in any direction through center of plaid, results in halves forming a mirror image

Eyelet--small hole in a garment or belt, finished by handstitching or a metal ring; used for drawstrings, cuff links, and to hold the prong of a buckle

Face--top fabric of a quilt or coverlet

Facing--a piece of fabric, fitted or bias, applied to finish the edges of necklines, armholes, and other openings in a garment

Fad--strikingly different fashion that is popular for a short period of time, perhaps a few weeks or a season, but is soon forgotten. Examples include socks with individual toes and dog-leash belts.

Fashion fabric--fabric used for construction of the garment

Fasteners--any notions used to close a garment (zippers, hooks and eyes, snaps, etc.)

Feed dogs--the teeth in a sewing machine or overlock machine, located below the presser foot, which move the fabric through the machine under the needle

Finger press--flattening an area, such as a fold or seamline, with the fingers

Flair--fullness at the bottom of a skirt, trousers, shirt, jacket, or a sleeve. The part of a garment that spreads out and widens at its lower edge.

Flat braid--braid available in many widths and colors; used singly or in several rows to create a border effect

Flat collar--collar which lies flat against the garment (e.g., a Peter Pan collar)

Fold-over braid--designed for trimming and enclosing raw edges of a garment, such as a neckline or sleeve opening. The top (right) side of a fold-over braid is narrower than the back side.

Frame--all the (usually wooden) trim around the window

Gathers--small, soft folds made by drawing fabric up on a line of hand or machine stitching

Glovestitch--decorative, topstitching technique done by hand. The stitches are the same size on top and on the underside.

Grade--to remove bulk by trimming seam allowances to different widths

Grain--direction of fabric threads. Yarns running parallel to selvage are on the lengthwise grain, and those running from selvage to selvage are on the crosswise grain. For perfect grain, the yarns must be at right angles to each other.

Grainline--straight line on a pattern which is always placed parallel or at right angles to the selvage, unless otherwise specified

Gusset--inset of triangular shaped fabric used to give more room or to make a bias area stronger (e.g., kimono sleeve or crotch area)

Hand baste--to stitch the garment together by hand using long, running stitches

Hand of fabric--the way in which the fabric drapes over the hand; the feel; drape-ability and handling of a piece of fabric

Head--total sewing machine excluding the cabinet or base on which it rests

Heading--decorative ruffle above the casing along the upper edge of a curtain

Hem--edge finish formed by folding under the raw edge and stitching it by hand or machine

Hemming stitch--decorative, open-work stitch made by drawing lengthwise threads of the fabric and fastening the crosswise threads in clusters

Hemmed patch pocket--single piece of fabric with hem at open edge of pocket and seam allowance turned under

Hook and eye--closure made of metal used to hold two pieces of fabric together securely (often on necklines and waistbands)

Horsehair braid--used to stiffen hem edges, especially for evening or bridal wear, so they will flare out softly

In-seam pocket--This pocket does not show from the outside, but rather, is an opening in the side seam. It is generally made from lining fabric and may need to be reinforced with staystitching to prevent raveling.

Inset--a piece of fabric or trim placed into the garment by cutting an opening and seaming the garment and inset together; a piece of fabric that has been inserted into a garment for better fit or decoration

Interfacing--inner fabric that provides support or body and shape retention to areas such as necklines, collars, cuffs, waistbands, lapels, button closures, and pocket flaps

Interlining--layer of fabric placed between the lining and the fashion fabric to give warmth and bulk

Interlock knit--fabric knit on a special machine to give it a smooth, reversible face. The stretchability of these knits is dependent upon the yarn used in their construction.

Inverted pleats--two side pleats which are turned toward each other and meet

Iron-on or fusible interfacing--fabrics specially coated so that they can be applied with heat, pressure, or steam

Kimono sleeve--sleeve cut out with bodice as one piece

Knife or side pleats--series of pleats that turn in the same direction, are equal in width (usually), and are pressed straight to the hem

Knitted interfacing--fabric usually made of nylon tricot with lengthwise stability and crosswise stretch; suitable for some knit fabrics

Lace--fancy flat or ruffled trim used to finish and decorate edges or as a decorative accent

Lapel--sometimes called revere, the part of a shirt, dress, or jacket which turns back against the garment, especially front part of garment that folds back to form continuation of collar

Lay out--positioning the pattern pieces on the fabric before cutting

Lettuce leaf edging--finish used on stretchy knit or jersey fabrics to achieve a ruffled effect

Line--basic seamlines, shoulder, and side seams which usually follow the outline of the body

Lined or faced patch pocket--A lining is attached to the pocket at hem edge and the pocket is finished by stitching and turning or by hemming lining to pocket.

Lingerie strap guard--a holder constructed inside the garment to keep lingerie straps from falling off the shoulders

Lining--inner layer of lightweight fabric cut from a lining pattern and sewn separately from the garment. The lining goes on the inside of the garment to conceal the construction seams, make the garment look nicer, and add to the durability of the garment. The lining also prevents skirts and slacks from stretching. In draperies, the lining protects the outside fabric, adds body, prevents fading, and adds drape-ability.

Lockstitch--stitch formed by a needle thread and a bobbin thread, as on a conventional sewing machine

Loop--fastener made of thread, cording, or fabric that extends past the finished edges of a garment on closings that do not overlap

Looper--an arm in the machine that makes a loop with its thread. The looper threads combine with the needle threads to make the stitches.

Machine hem--hem that is completely stitched by machine, usually at 10 stitches per inch. This may be a machine-made blind hem, a narrow-rolled hem, or a topstitched hem. It is found on sportswear and home decorator items such as curtains, bedspreads, and slipcovers.

Miter--diagonal seam at the corner used to eliminate bulk and make corner neat

Motif--print or design on the fabric

Napped fabric--short surface fabrics having fibers that lay smoothly only when brushed in one direction

Nonwoven interfacing--fabric which resembles felt and has no threads. Some types have directional stretch; some may be cut in any direction.

Notions--all the extras that it takes to make a garment or product: thread, zippers, hem tape, etc.

Overlap--amount of fabric required to cover the center of a drapery rod where one drapery lies under the other when closed

Overlock machine stitch--made with three or four threads; used to sew seams and simultaneously finish seam allowances

Overlock stitch--made with two threads on a conventional sewing machine; used to finish seam allowances and edges, not to sew seams

Panel or length--yardage or amount of fabric, in full widths, required for the complete **length** of the project

Partial roll collar--in the back half (usually) of the collar which lies against the neck. The rest rolls over and covers the part which lies against the neck. The front of the collar lies against the body.

Patch pocket--separate fabric piece attached to the garment

Pin baste--placing pins at right angles to seamline in seamline to hold fabrics together. Stitching is done while pins are in place.

Pin tuck--tiny, narrow fold stitched very close to the foldline

Pinked edge--notched edge finish made with pinking shears; used on fabrics that ravel easily

Pins--used to hold the pattern to the fabric while cutting and to hold the fabric pieces together during construction

Piped pocket--The opening is covered by lips of fabric similar to a bound buttonhole. This type is used in tailored garments or as decoration.

Piping--cord enclosed in bias fabric; similar to cording, except that a smaller cord is used

Placket--opening which makes room in a part of a garment so that the garment may be put on

Pleat--fold in the fabric made by doubling the fabric over on itself, resulting in three thicknesses of fabric. It is used to control fullness in a garment.

Point presser--piece of equipment shaped so that a right angle or sharp point can be easily pressed

Pounder or pounding block--smooth piece of wood used to flatten seams after pressing

Preshrink--to wash or dry clean fabric and notions before sewing them into a garment or product so that they will not shrink after they have been sewn

Press cloth--fabric placed between the garment and the iron during pressing

Pressing mitt--small piece of equipment that fits over the hand; can be placed inside the sleeve for steaming

Pressure--amount of force the presser foot puts on the fabric during stitching. Pressure should be adjusted to suit the fabric.

Prickstitch--decorative or functional handstitch used as an edge finish or to apply zippers in tailored garments

Quality characteristics--the traits of a fiber or fabric which make it desirable

Quarter-scale pattern--pattern that is a smaller, proportional (one-fourth of the size) version of a commercial pattern without seamlines

Raglan sleeve--a sleeve, with dart or seam on top, which includes part of the shoulder of the garment

Regular stitch--10 to 12 stitches per inch. Custom sewing may be done with 12 to 24 stitches per inch for a better appearance in some fabric.

Repeat--amount of fabric required to match exactly the motifs in a fabric when panels are placed side by side

Return--distance between the wall and the front of the curtain or drapery rod

Reweaving--restoring a woven fabric to its original design by hand sewing threads back into place; repairing a snag or tear in a woven fabric

Rick rack--zigzag braid available in a large variety of sizes and colors. It can be applied into a seamline or topstitched for trim.

Roll line--the line on which a lapel or collar turns back on itself in a garment; markings sometimes found on a pattern indicating the area along which the collar and lapel are turned back

Ruffle--band of fabric, either hemmed or doubled, that is gathered or pleated and applied to a garment's edge for trimming or decoration

Ruffling--edging which gives a graceful appearance and adds weight to curtains to make them hang and drape more attractively

Saddle stitch--decorative, topstitching technique done by hand; has longer stitches on top and shorter ones on the underside

Sash--part of the window that includes the glass and its frame

Seam--stitching which holds two parts of a garment together (usually sewn on a seamline indicated on the pattern piece)

Seam board--piece of equipment used for producing flat seams, especially on wools

Seam finish--treatment of a seam to keep it from raveling or fraying

Seam sealant--liquid used to secure the end of a seam

Self-fabric interfacing--interfacing cut from the fashion fabric; used when fashion fabric is very sheer

Sequins--small, shiny, flat circles sewn on to fabric in groups or designs as a decorative accent

Serger--another name for an overlock machine

Set--way a garment lies on the body

Set-in pocket--pocket which is placed into an opening created in the garment by slashing

Set-in sleeve--a sleeve placed in a regular armhole

Sew-in interfacings--fabric that must be stitched, by hand or machine, to the fashion fabric

Shank--a stem between the fabric and the button; may be part of the button or made with thread while sewing on a button

Shoulder pad holders--a cover of garment fabric to hold a shoulder pad or a fastening to attach pad to garment and remove it easily

Shrink--to become smaller permanently. Water, steam, or dry cleaning may cause fabric or fibers in the fabric to contract or re-align.

Sill--extended part of a window at the bottom of a window sash; similar to a shelf

Sizing--chemical and/or starch added to a fabric to give it stiffness and body. It can be used to make poor quality fabric appear better. Sizing usually comes out with the first washing.

Sleeve board--small pressing board providing a flat surface on which to press sleeve seams open

Sleeve cap--the curved upper part of the sleeve between notches on a pattern, which allows for fit at top of upper arm

Slipstitch--tiny, invisible handstitch taken through a fold of fabric; used for hemming skirts, attaching pockets, finishing off waistbands, putting lining in coats and suits, and tacking facings to a garment

Slopers--basic pattern shapes used to design and alter patterns

Smocking--embroidery done on a piece of fabric gathered by hand or machine into small, regular folds

Snap--closure made of metal in two parts, a ball and a socket; used in dressmaking to close an opening

Soutache or bias braid--braid trim cut on the bias to make it stretchy; used to form and outline designs on a garment (used in Spanish design garments)

Spaced tucks--where there is a predetermined space between each tuck

Stability--lack of stretch in the interfacing

Standing collar--lies against the neck (e.g., a mandarin collar)

Staystitching--row of machine stitching which helps garment maintain its shape while being constructed

Stay-taping--applying a piece of tape on a seamline to prevent stretching

Stitch--hand- or machine stitch used for hemming and holding facings in place. This stitch is invisible (or almost invisible) on the outside of the fabric.

Stitch finger--a small bar that holds the stitches while they are being formed and keeps them from pulling the fabric in at the edge

Straight ruffle--where fullness is cut in a strip and gathered using two to three times the length of the edge it will be sewn to

Straight stitch machine--a machine that sews a straight line forward and (usually) backward. Some are available with accessories to enable them to perform other types of stitching.

Stretch--amount of flexibility in the interfacing

Structural darts--darts which end at the fullest part of the body or at a body point

Tailor's ham--oblong, firmly stuffed cushion covered in fabric of half cotton, half wool. It is designed for use while pressing the curved areas of a garment.

Tailor's hem--special hem used in bulky and heavy fabrics that do not ravel

Tension--tightness of the upper (needle) and lower (bobbin) threads which interlock to form a stitch. When the two threads are balanced, they are drawn into the fabric to the same degree.

Topstitching--machine stitching parallel to a seam or finished edge of a garment for decoration or to hold a crease on a folded or pressed edge of a seam; done from the right side

Trim--to cut off part of the seam allowance

Trims--decorative extras, such as lace, braid, piping, and decorative stitches added to create interest and design

True seamlines--to redraw seamlines so that they are as even or curved as they were before the pattern was altered

Tubing--hollow cylinder of fabric used for button loops and decorative trim

Undercollar--sometimes called a collar facing; finishes the collar and conceals raw edges

Underlining--layer of lightweight fabric that is basted to the fashion fabric and sewn as one. The underlining is cut exactly like the fashion fabric. It is added for support and to prevent stretching and sagging.

Understitching--stitching which holds seam to facing or under collar

Uneven plaid--a plaid with an unbalanced design in the crosswise or lengthwise direction, or both

Upper collar--collar which shows on finished garment

Valance--separate ruffle at the top of the window or over a curtain

Velcro®--fastener made from two nylon tape strips of looped pile that intermesh when pressed together. One strip is fleece covered and the other is burr covered.

Vertical hemming stitch--durable, stable stitch best suited to hems where hem edges are finished with hem tape or stretch lace. This is an invisible hem on the outside. Only very small stitches show on the inside.

Waistband--part of a skirt, dress, or trousers fitted about the waist and made from a separate garment piece

Weight of interfacing--refers to the firmness or lightness, stiffness or suppleness of the interfacing; usually classified as light, medium, or heavy and suit weight or outerwear weight

Welt pocket--hidden pocket with a visible slit. This may be a single or double welt and is sometimes covered with a flap.

Woven interfacing--fabric with grain lines that must be considered when cutting

Yoke--a piece of fabric added to the top front or back, or both, of blouses and skirts; adds design, fitting, and strength

Zigzag machine--a machine that sews a straight line plus other types of stitches. Most zigzag machines make buttonholes, sew on buttons, make a blind hem, and make decorative stitches.

Zipper--closure made of metal or nylon chains attached to a tape so that it can be stitched into a placket

Zipper foot--small machine foot with one prong; used for stitching in zippers; usually adjustable for right or left side application

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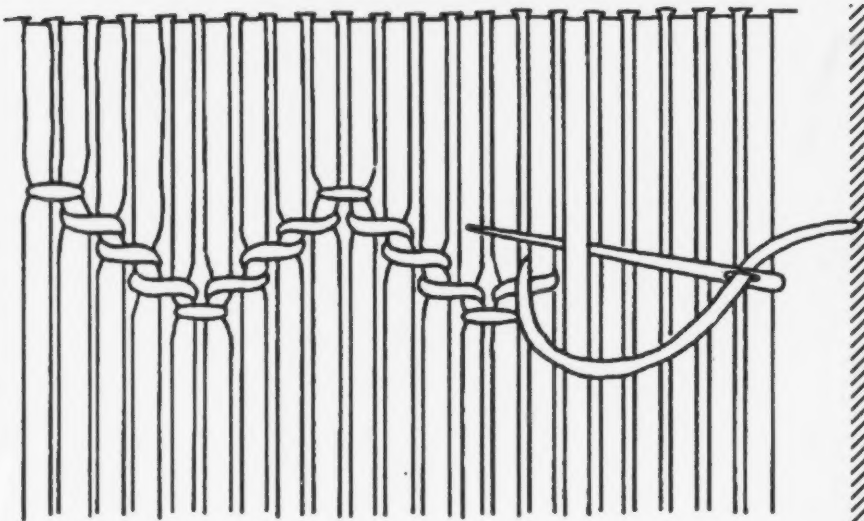
Instructor Guide

Custom Sewing

MODULE TWO



CUSTOM SEWING, MODULE 2

Unit IV: Construction Techniques (in two parts)

Unit V: Applying Fasteners

Unit VI: Applying Trims and Finishes

Unit VII: Windows and Beds

Produced by the
Instructional Materials Laboratory
University of Missouri-Columbia
8 London Hall
Columbia, MO 65211

Catalog No. 40-2202-I
1993

The activity which is the subject of this report was supported in whole or in part by funds from the Department of Elementary and Secondary Education, Division of Vocational and Adult Education. However, the opinions expressed herein do not necessarily reflect the position or policies of the Missouri Department of Elementary and Secondary Education or the Division of Vocational and Adult Education, and no official endorsement should be inferred.

ACKNOWLEDGMENTS

Appreciation is expressed to the many individuals who gave their time, knowledge, and talents to the development of this curriculum guide. A special thanks is extended to the following persons for:

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FOREWORD

The Custom Sewing guide, which has been divided into three modules, is appropriate for the 20.0304 Custom Apparel/Garment Seamstress program which prepares individuals to construct, alter, and prepare garments to customer specifications.

Custom Sewing has been developed not only as a curriculum guide, but also to provide the teacher with competency-based instruments for planning and evaluation, resource lists, suggested activities, and a wide variety of hands-on student materials. The guide is intended to provide a framework for instruction in custom sewing that the teacher can localize, personalize, and supplement to fit the needs of students, area of study, and individual teaching and learning styles.

This guide includes **Module 1:** Fabrics and Textiles, Adjusting the Home Sewing Machine, and Overlock Machines; **Module 2:** Construction Techniques, Applying Fasteners, Applying Trims and Finishes, and Windows and Beds; and **Module 3:** Measuring/Fitting Problems, Altering Ready-Made Products, and Altering Flat Patterns. While this guide was developed for the Custom Apparel/Garment Seamstress program, it is appropriate for use in other clothing and textiles classes.

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CUSTOM SEWING

COMPETENCY LIST

A. Using Fabrics and Textiles

1. Identify unknown fibers
2. Use textile labels to make fabric comparisons
3. Rate dye methods on fabrics for penetration and effectiveness
4. Rate quality characteristics of fabrics
5. Coordinate patterns with fabrics
6. Work with napped fabrics
7. Work with interlock (double) knits
8. Work with even and uneven plaids
9. Straighten fabric grain
10. Pretreat fabric, notions, and trims
11. Lay out and cut pattern pieces correctly for the type of fabric used

B. Taking Measurements

1. Prepare customer for measurement
2. Chart woman's measurements
3. Chart man's measurements
4. Measure windows for drapery construction
5. Measure bed for bedspread construction/dust ruffle construction

C. Altering Ready-Made Products or Pattern Design

1. Add/eliminate seam
2. Add/eliminate cuffs (sleeve and pants)
3. Change collar and/or lapels
4. Shorten/lengthen collar
5. Add/eliminate yoke
6. Remove pleats
7. Add/remove flair (pants and skirt)
8. Change darts (location and curve)
9. Change location of fasteners (e.g., buttons, buttonholes, zippers)
10. Change/substitute types of fasteners
11. Change pocket (inseam, hip, welt)
12. Make insets (alter width, length)
13. Make facing pattern
14. Make lining patterns
15. Adjust waists
16. Adjust widths of garments or products
17. Adjust lengths of garments or products
18. Shorten sleeves
19. Reweave hole in garment/product

D. Adjusting the Home Sewing Machine

1. Adjust lower thread tension

2. Adjust presser foot pressure
3. Adjust upper thread tension
4. Clean machine
5. Clear bobbin hook race
6. Replace needle

E. Adjusting the Home Overlock Machine

1. Thread the overlock machine
2. Adjust tensions
3. Clean machine
4. Replace needles

F. Demonstrating Construction Techniques

1. Transfer pattern markings
2. Attach underlining/interlining
3. Attach lining
4. Hem garment/product
5. Apply interfacing (fusible and nonfusible)
6. Staystitch garment/product pieces
7. Apply stay strip
8. Construct dart
9. Construct seam
10. Ease/gather fullness into seam
11. Construct a patch pocket
12. Apply topstitching
13. Construct an inseam pocket
14. Construct a welt pocket
15. Construct a front hip pocket
16. Perform understitching
17. Construct collar
18. Construct facing
19. Construct jacket collar and lapels
20. Construct shirt tab (neckline placket)
21. Attach sleeve placket
22. Construct sleeve cuff
23. Construct set-in sleeve
24. Construct kimono sleeve
25. Construct gusset
26. Construct raglan sleeve
27. Construct pants cuffs
28. Construct pleat
29. Construct tuck
30. Construct ruffle
31. Construct waistband
32. Construct belt loops/carriers
33. Construct casing (fold down and applied)
34. Construct lingerie strap guard
35. Miter corner
36. Baste garment/product together for fitting

37. Fit garment/product
38. Remove spots and stains
39. Press completed garment/product
40. Construct draperies
41. Construct bedspread (tailored and with bed ruffle)

G. Applying Fasteners

1. Attach buttons (sew-through and shank)
2. Construct buttonholes and loops
3. Attach eyelets
4. Attach snaps (sew-through and gripper)
5. Attach hook and eye
6. Attach tape fasteners (i.e., Velcro®, snaps, hook and eye, etc.)
7. Construct belt
8. Insert zippers

H. Applying Trims and Finishes

1. Apply applique
2. Apply braids
3. Apply cording/piping
4. Apply decorative stitches (by machine and by hand)
5. Apply lace
6. Apply lettuce (ripple) edging
7. Apply sequins
8. Apply beading
9. Smock pieces
10. Construct continuous bias strip
11. Construct cording
12. Construct piping
13. Construct tubing

I. Altering Flat Patterns

1. Adjust pattern for neckline differences
2. Adjust pattern for shoulder differences
3. Adjust pattern for arm differences
4. Adjust pattern for chest/bust differences
5. Adjust pattern for back differences
6. Adjust pattern for waist differences
7. Adjust pattern for abdomen differences
8. Adjust pattern for hip/buttock differences
9. Adjust pattern for thigh differences
10. Adjust pattern for crotch differences
11. Adjust pattern for leg length differences
12. Lengthen/shorten pattern
13. Increase/decrease width of pattern
14. True pattern seamlines after adjustment

Custom Sewing

Construction Techniques, Part 1
Unit IV

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
F1	1			1	1		
F2	2			2	2		
F2	3			2	3		
F3	4			2	4		
F5	5			3	5, 6, 7		
F6, F7	6			4	8, 9		
F8	7			5	10		
F10	8			6	11		
F9	9			6	11		
F11	10			7	12		
F12	11			7	12		
F13	12			7	13		
F14	13			7	14		
F15	14			7	15		
F17	15			8	16		
F16	16			8	16		
F18	17			8	17		
F19	18				18		
F20	19				19		

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

CONSTRU TION TECHNIQUES

UN IV, PART 1

UN OBJECTIVE

Upon completion of this unit, the student sho l be able to accomplish all the steps necessary to construct garments. Competencies will be demonstra l by correctly performing the procedures outlined in the Assignment and Job Sheets.

SPEC IC OBJECTIVES

After completion of this unit, the student sh id be able to:

1. Based on the content outline, TRANSF PATTERN MARKINGS by completing Assignment Sheet 1 and Job Sheet 1.
2. Based on the content outline, ATTAC UNDERLINING by completing Assignment Sheet 2 and Job Sheet 2.
3. Based on the content outline, ATTACH TERLINING by completing Assignment Sheet 2 and Job Sheet 3.
4. Based on the content outline, ATTA LINING by completing Assignment Sheet 2 and Job Sheet 4.
5. Based on the content outline, APP FUSIBLE AND NONFUSIBLE INTERFACING by completing Assignment Sheet 3 and J Sheets 5, 6, and 7.
6. Based on the content outline, DESCRI WHERE STAYSTITCHING AND STAY-TAPING ARE NECESSARY AND DEMONSTRAT THE ABILITY TO STAYSTITCH AND STAY-TAPE CORRECTLY by completing Assignm t Sheet 4 and Job Sheets 8 and 9.
7. Based on the content outline, CONS UCT DARTS AND PRESS DARTS CORRECTLY by completing Assignment Sheet 5 and J Sheet 10.
8. Based on the content outline, EASI ATHER FULLNESS INTO A SEAM by completing Assignment Sheet 6 and Job Sheet 11.
9. Based on the content outline, CONST CT SEAMS AND FINISH SEAMS APPROPRIATELY by completing Assignment Sheet 6 an ob Sheet 11.
10. Based on the content outline, CONSTR CT A PATCH POCKET by completing Assignment Sheet 7 and Job Sheet 12.
11. Based on the content outline, APPLY STITCHING by completing Assignment Sheet 7 and Job Sheet 12.

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12. Based on the content outline, CONSTRUCT INSEAM POCKET by completing Assignment Sheet 7 and Job Sheet 13.

13. Based on the content outline, CONSTRUCT WELT OR SET-IN POCKETS by completing Assignment Sheet 7 and Job Sheet 14.

14. Based on the content outline, CONSTRUCT FRONT HIP POCKET by completing Assignment Sheet 7 and Job Sheet 15.

15. Based on the content outline, CONSTRUCT A COLLAR by completing Assignment Sheet 8 and Job Sheet 16.

16. Based on the content outline, PERFORM UNDERSTITCHING by completing Assignment Sheet 8 and Job Sheet 16.

17. Based on the content outline, CONSTRUCT A FACING by completing Assignment Sheet 8 and Job Sheet 17.

18. Based on the content outline, CONSTRUCT A JACKET COLLAR AND LAPEL by completing Job Sheet 18.

19. Based on the content outline, CONSTRUCT A SHIRT TAB (NECKLINE PLACKET) by completing Job Sheet 19.

F. Answers to Assignment Sheets

G. Job Sheets

1. JS 1--Transfer Pattern Markings to Garment
2. JS 2--Attach Underlining to Garment
3. JS 3--Attach Interlining to Garment
4. JS 4--Attach Lining to Garment
5. JS 5--Investigate Interfacings
6. JS 6--Apply Fusible Interfacing to Garment
7. JS 7--Apply Nonfusible Interfacing to Garment
8. JS 8--Staystitch Garment/Product Pieces
9. JS 9--Apply Stay-Tape
10. JS 10--Construct Dart
11. JS 11--Construct Shoulder Seam and Gather/Ease Fullness into Seam
12. JS 12--Construct a Patch Pocket
13. JS 13--Construct an Inseam Pocket
14. JS 14--Construct a Welt Pocket
15. JS 15--Construct a Front Hip Pocket
16. JS 16--Construct a Flat Collar with Understitching
17. JS 17--Construct Facing
18. JS 18--Construct Jacket Collar and Lapel
19. JS 19--Construct Neckline Placket (Shirt Tab)

RESOURCES

(NOTE: Also see Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

A. Butterick. Vogue Sewing. New York: Harper & Row, 1982.

B. McCall Pattern Guide to Sewing Power. Dubuque, IA: Kendall-Hunt, 1983.

C. New Vogue Sewing Book. New York: Butterick Publishing, 1980.

D. Sewing Essentials. Singer Sewing Reference Library. Minnetonka, MN: Cy DeCosse Incorporated, 1986.

(NOTE: This is effectively demonstrated by stitching a neckline curve from shoulder to center front on left and right and then laying one on top of the other. It works best with a loosely woven fabric.)

   b. Provide students with samples of different fabrics which stretch differently, such as single knits, double knits, and loosely and closely woven fabrics.
   c. Demonstrate correct staystitching procedures on necklines, shoulder seams, and for reinforcement of areas such as a placket and a corner.
   d. Demonstrate stay-taping of a shoulder seam on a knit fabric or show one on a ready-made knit garment.

3. Constructing seams

   a. Demonstrate French, flat fell, welt, and overcast seams and discuss the type of garments and fabrics appropriate for them.
   b. Demonstrate proper pressing technique on seams and explain the use of pressing equipment.

4. When constructing pockets, demonstrate set-in and welt pockets.

5. Construct collars, facings, jacket collars, and lapels.

   a. Provide students with examples of different types of collars and facings.
   b. Demonstrate understitching on curved collars and facings.
   c. Demonstrate construction of a jacket collar with lapels. Include understitching and topstitching to help students determine placement of understitching when there is a roll-line on the jacket lapel.

H. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Assignment Sheets

   1. AS 1--Transfer Markings
   2. AS 2--Underlining, Interlining, and Lining
   3. AS 3--Interfacing
   4. AS 4--Staystitching and Stay-taping
   5. AS 5--Darts
   6. AS 6--Construct Seams
   7. AS 7--Pockets
   8. AS 8--Collars and Facings

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Provide students with Objective Sheet.

C. Discuss Unit and Specific Objectives.

D. Provide students with Information Sheet.

E. Discuss the Information Sheet.

F. Provide students with Assignment Sheets and Job Sheets. Assignment Sheets 1-8 may be used as part of a Unit Test, if desired. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

1. At the end of the unit have each student choose a pattern and complete a garment to demonstrate his/her ability to carry out these techniques.
2. No pattern will include all of these techniques, but the pattern should be chosen with the idea that it will demonstrate ability in as many areas as possible.

G. Integrate the following activities throughout the teaching of this unit:

1. Interfacing

   a. Provide students with samples of each type of interfacing and discuss characteristics of each.
   b. Demonstrate the proper techniques for attaching interfacings by fusing, stitching into seam, and applying by hand.
   c. Provide students with samples of fabrics which they will not likely be using for garments (e.g., different weights of woolens, polyesters) and suitable interfacings for the fabrics.
   d. Have the students prepare samples of fabric swatches with suitable types of interfacings properly attached. Have the students label the fashion fabric swatches with name, fiber content, and uses and the interfacing swatches with name, weight, and type. These pages should be included in the students' notebooks of samples and techniques.
   e. Have students evaluate pattern guides and envelope backs for interfacing suggestions and procedures.

2. Staystitching, stay-taping, and directional stitching

   a. Demonstrate directional stitching by showing how a cut, curved edge can be stretched more by stitching in one direction than in the opposite direction.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

INFORMATION SHEET

I. Transferring pattern markings

(Objective 1; AS 1; JS 1)

A. Purpose

1. Achieve the proper fit and look of the design
2. Make it easier to fit the pattern pieces together

B. What to transfer

1. Darts, pleats, tucks
2. Placement lines for pockets, trims
3. Unusual seamlines
4. Any other lines which will be needed in the construction of the garment

C. What to use for marking and guidelines

1. Do **not** use permanent markings except on the inside where they will not show through.
2. On **washable** fabric use markers which will wash out or may be removed with water.
3. On **sheer** or **very light** fabric, use markers which do not show through to the outside.
4. On **bulky** or **very thick** fabric, use markers which will readily transfer and be visible during sewing.

D. What to use for marking and tools

1. Tracing wheel and dressmakers' carbon paper
   (NOTE: Beginning students may wish to use this method even though it is very time-consuming. More advanced students should use one of the faster methods below.)
   a. Use on the **inside** of any fabric which will accept the marking.
   b. This method is especially quick for light- and medium-weight fabric.
   c. Soft and bulky fabrics tend not to accept the markings and cause the paper pattern to tear.
   d. Test on the wrong side of the fabric and use the following criteria to decide on the suitability.
      (1) Does it show through to the right side?
      (2) Does it show up well enough to be useful when sewing?
      (3) Will it wash out after pressing?
      (4) Does applying it tear the pattern or the tracing carbon?
2. Washout marking pens (available in several colors)
   (NOTE: These pens were developed for use on polyester and other synthetic fabrics. Some problems have been reported with use on natural fiber fabrics.)
   a. Use only on fabric which can be spotted or washed with cold water.
   b. Test on a piece of fabric on the right side.

3. Tailor's chalk or pencil (available in several colors)
   a. Test on a piece of fabric on the right side.
   b. Lines should stay on long enough to be useful when sewing.
   c. Chalk should brush off after use.
4. Tailor's tacks (Stitches are taken through fabric and pattern; thread is left in fabric to mark construction points.)
   a. Use on any fabric except one which shows needle holes (for example: leather, vinyl, satin, some silks, and velvets).
   b. Test questionable fabrics before using.
5. Snipping (a small clip taken in the seam allowance to mark where seams begin and/or end) is useful on any fabric.
6. A running basting stitch can be used to mark center front or center back lines.

E. Transferring a dart (or other marking) to fabric using a tracing wheel and carbon

1. Place the paper pattern and two layers of fabric, **right sides together,** on a flat surface with **wrong** side of fabric to the outside. If the surface is a wood table, pad with a magazine or piece of cardboard.
2. Remove pins near the area to be marked.
3. Place one piece of tracing carbon under the fabric, next to the table, **carbon side up.** Place another piece of carbon between the pattern and the fabric (under the pattern; on top of the fabric) **carbon side down.** ***(See Fig. 4-1.)***

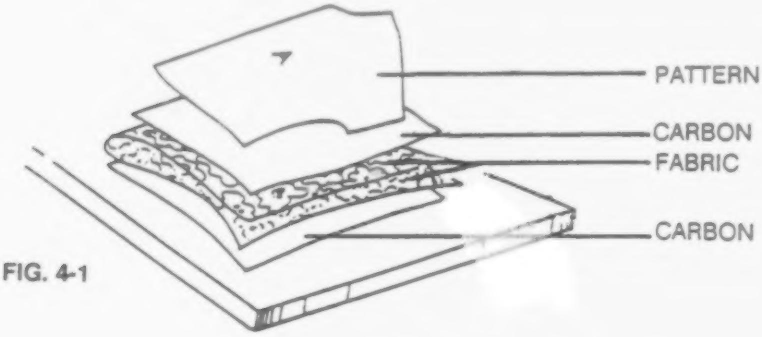


FIG. 4-1

4. Use the tracing wheel to mark over the stitching lines of the dart (or other marking). Follow the lines exactly. Use a ruler if desired. Extend the lines at the point so that they cross. Mark a horizontal line at the point so you can tell where to stop stitching. Remove the carbon paper.

F. Transferring a dart (or other marking) to fabric using a washout marking pen

1. Place the fabric and pattern on the table. Remove pins from marking area.
2. Fold the pattern along one side of the dart stitching line (or other line to be marked) back against itself. Place a ruler along the fold and draw dart stitching line. Unfold pattern and pin back in place.
3. Fold pattern back along the other side of dart stitching line. Place a ruler along the fold and draw dart stitching line. Place ruler at point of dart and draw a horizontal line.
4. Place pattern on other side of garment and repeat.

G. For transferring a dart to fabric using tailor's chalk or pencil, follow the procedure outlined above for transferring with a washout marking pen.

H. Transferring a dart to fabric using tailor's tacks

1. Place the paper pattern and two layers of fabric, right sides together, on a flat surface.
2. Thread needle with a double strand of contrasting color thread. Take a stitch through the pattern and both thicknesses of fabric at the dart point, leaving a tail of about 1" of thread. *(See Fig. 4-2.)*

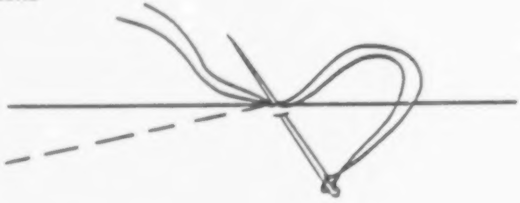


FIG. 4-2

3. Make another stitch in the same place, leaving a thread loop. Cut the thread leaving a tail of about 1". *(See Fig. 4-3.)*

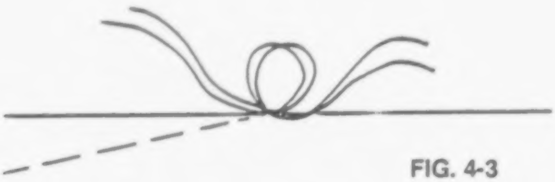


FIG. 4-3

4. Follow this procedure at several places on the dart stitching lines. Place the tacks opposite each other on the two sides of the dart so they can be matched. (NOTE: Some darts are drawn with circles on the stitching lines for matching. Use these circles for placing your tailor's tacks.)
5. Clip the loops and remove the pattern.
6. Separate the two layers of fabric slightly and clip the threads between them, leaving a piece of thread in each fabric.

I. Transferring markings to fabric by snipping

(NOTE: This is the quickest method for transferring marks.)

1. Snipping can be done in the seamline at the wide end of the dart to mark the dart stitching line.
2. Make a small clip (about 1/8" long) at the dart stitching lines on both sides and at the center. Snips may also be used to mark any

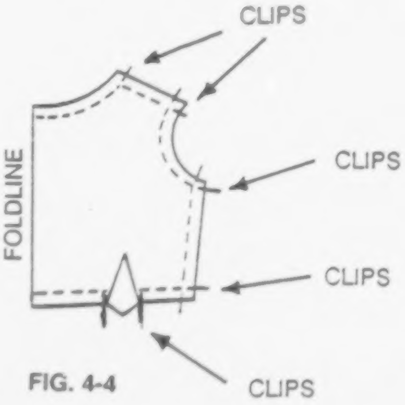


FIG. 4-4

seamline or construction point, such as shoulder seam marking at top of sleeve. ***(See Fig 4-4.)***
(CAUTION: Do not snip into seams that are folded.)

J. Transferring markings to fabric by running a basting line

1. Place garment flat with pattern unpinned.
2. Run a basting stitch (by hand) on the line you need marked.

II. Attaching underlining, interlining, and lining

(Objectives 2, 3, 4; AS 2; JS 2, 3, 4)

A. Terms and definitions

1. Compatibility--having the same care qualities
2. Fashion fabric--fabric used for construction of the garment
3. Hand of fabric--the way in which the fabric drapes over the hand; the feel; drape-ability and handling of a piece of fabric
4. Interlining--layer of fabric placed between the lining and the fashion fabric to give warmth and bulk
5. Lining--inner layer of lightweight fabric cut from a lining pattern and sewn separately from the garment. The lining goes on the inside of the garment to conceal the construction seams, make the garment look nicer, and add to the durability of the garment. The lining also prevents skirts and slacks from stretching. In draperies, the lining protects the outside fabric, adds body, prevents fading, and adds drape-ability.
6. Underlining--layer of lightweight fabric that is basted to the fashion fabric and sewn as one. The underlining is cut exactly like the fashion fabric. It is added for support and to prevent stretching and sagging.

B. Underlining

1. Use an underlining:
    a. To add body or support to the fabric of the garment
    b. To help prevent wrinkling
    c. To help the garment retain its shape
2. Fabric chosen for the underlining must be compatible with the fashion fabric. It must:
    a. Have the same care qualities as the fashion fabric
    b. Not change the hand of the fashion fabric
3. To test for compatibility when purchasing underlining:
    a. Read the care labels and fiber content for both fabrics.
    b. Drape the underlining under the fashion fabric over your hand and observe the qualities of the two together.
4. To preshrink the fabric:
    a. If garment is to be washed, prewash and dry both the underlining and the fashion fabric in the way that the garment will be washed and dried when it is completed.
    b. If garment is to be dry cleaned, have a reputable cleaner preshrink both the underlining and the fashion fabric.
5. To construct the underlining:
    a. Cut underlining pieces exactly as the garment was cut, including collars and facing. (Some facings may not be underlined if this will make the seams too bulky.)

b. Mark underlining carefully. The fashion fabric does **not** need to be marked since the underlining will completely cover the inside of the fashion fabric.

c. Place each garment section on a flat surface with the **wrong** side up. Place the underlining piece on the garment with markings showing. If the fashion fabric does not show pin holes, pin baste the two fabrics together, beginning at the center. (NOTE: Pinning some fabric, such as satin, may leave permanent holes. These fabrics must be pinned and basted only within the seam allowances or on the inside of darts.)

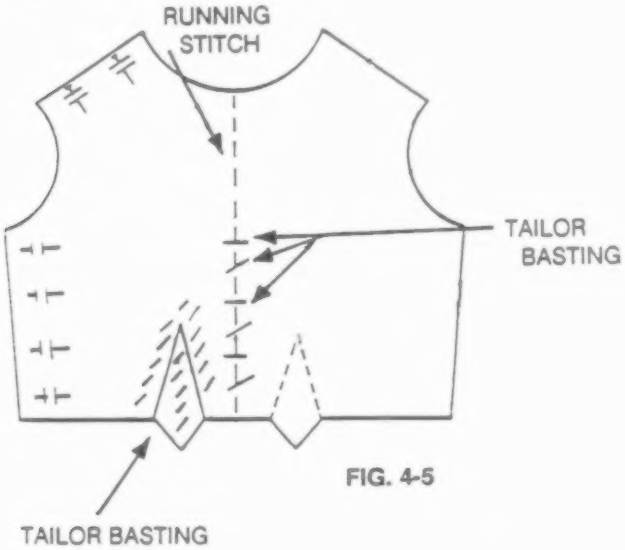


FIG. 4-5

d. Hand baste or tailor baste in the center. Tailor baste on the center line of the dart and on the outside of the dart lines. This makes it easier to remove the basting after the dart has been stitched. Pin-baste seams. Carefully fold each piece after attaching underlining. ***(See Fig. 4-5.)***

e. The garment is ready for staystitching. Staystitching must be done carefully so that neither fabric is stretched or pulled. Underlined garments may require staystitching around most edges to hold the two pieces together.

f. The garment is now constructed as if the fashion fabric and underlining were one.

C. Interlining

1. Use an interlining to add warmth to a garment (usually a coat, jacket, or some other type of outerwear).
2. Interlining fabrics are usually loosely woven and soft.
3. The interlining is usually attached to the lining fabric in the same way that underlinings are attached to the fashion fabric. Sometimes an interlining is bonded or attached in some way to the lining fabric when it is purchased.
4. To construct an interlining:
    a. Cut the interlining from the lining pattern pieces which will be interlined.
    b. Baste to the wrong side of the lining.
    c. Machine stitch the seams of the lining.
    d. Trim the interlining from the garment seams to reduce bulk.

e. Press seams open.

D. Lining

1. The lining is sewn separately and attached to the garment. It is used to provide a finished look on the inside, hide seams, add warmth, protect the outer fabric, preserve shape, and provide a smooth interior surface.
2. Lining fabrics should be durable, compatible with garment fabric, and attractive in color. They usually provide a smooth surface which slides easily over other clothing.
3. Constructing a lining:
   a. Cut the lining from the lining pattern pieces.
   (NOTE: If there is no lining pattern and you wish to add one, use the garment pattern pieces and remove about 1" from the hem areas. Facings are usually cut away except for a 5/8" seam.)
   b. Construct the lining by stitching the lining pieces together and pressing darts and seams open.
   (NOTE: Center back seams in a coat or jacket are usually not pressed open because a lining usually has a pleat in the center back for ease in wearing. If the fashion fabric has a zipper in the seam, the lining is left open in that area.)
   c. Finish the seams if:
      (1) The lining fabric may ravel so much that it will not wear well.
      (2) The lining is open at the hem and the lining fabric might ravel enough that threads would show at the hem after a period of wearing.
   d. Pin the lining fabric into the garment when the garment is finished.
   (NOTE: The lining of a skirt or trousers may be pinned to the waistline seam when the waistband is attached.)
      (1) The lining may be sewn to the facing by hand or stitched by machine. *(See Fig. 4-6.)*
      (2) The lining in the sleeve and at the bottom of a jacket should be slightly longer than the length of the sleeve or jacket; it should be hemmed with a pleat that allows ease. *(See Fig. 4-7.)*

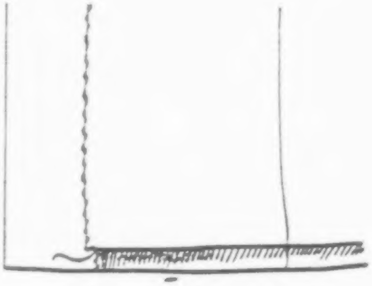


FIG. 4-6

   e. In most lined coats and dresses, the lining is hemmed separately from the garment. The longer the garment, the more freedom is needed for the lining and the garment to move independently of each other.
   (NOTE: A loose lining can be anchored to the garment by loosely basting the seams of the garment and lining together or by using a loose thread tack between the garment and the lining.)

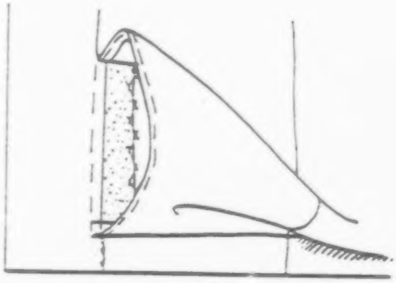


FIG. 4-7

   f. If the garment has a zipper, the lining can be hand hemmed to the zipper tape.

III. Applying interfacing

(Objective 5; AS 3; JS 5, 6, 7)

A. Terms and definitions

1. Bias nonwoven interfacing--fabric that stretches in all directions
2. Dress fabric interfacing--fabric such as lawn, muslin, batiste, taffeta, organdy, percale, unbleached muslin and some lining or underlining fabric; designed for use in garments, but sometimes used for interfacing
3. Interfacing--inner fabric that provides support or body and shape retention to areas such as necklines, collars, cuffs, waistbands, lapels, button closures, and pocket flaps
4. Iron-on or fusible interfacing--fabrics specially coated so that they can be applied with heat, pressure, or steam
5. Knitted interfacing--fabric usually made of nylon tricot with lengthwise stability and crosswise stretch; suitable for some knit fabrics
6. Nonwoven interfacing--fabric which resembles felt and has no threads. Some types have directional stretch; some may be cut in any direction.
7. Self-fabric interfacing--interfacing cut from the fashion fabric; used when fashion fabric is very sheer
8. Sew-in interfacings--fabric that must be stitched, by hand or machine, to the fashion fabric
9. Stability--lack of stretch in the interfacing
10. Stretch--amount of flexibility in the interfacing
11. Weight of interfacing--refers to the firmness or lightness, stiffness or suppleness of the interfacing; usually classified as light, medium, or heavy and suit weight or outerwear weight
12. Woven interfacing--fabric with grain lines that must be considered when cutting

B. Functions of interfacing

1. Provides support for closures such as buttons, buttonholes, snaps, grippers, and Velcro®
2. Provides support or crispness to parts of the design such as collars, cuffs, hems, facings, or trims
3. Provides strength to parts of the garment which may have strain such as facings on necklines and armholes

C. Guidelines for selecting interfacing

1. The interfacing should not change the look of the fashion fabric.
2. More than one type of interfacing may be used in a garment. For example, a crisp interfacing may be used for a collar, while a softer one may be used under buttons and buttonholes.
3. Choose the interfacing by trying it under the fashion fabric.
4. The color of the interfacing should not change the color of the fashion fabric. For example, white fabric usually requires a white interfacing.
5. The interfacing must require the same care as the fashion fabric. For example, hair canvas cannot be used in a washable garment because it cannot be washed.
6. If more stiffness is desired than given by one layer of interfacing, two layers may be used. For example, the waistband and waistband facing could both be interfaced.

D. Cutting, marking, and applying interfacing

1. Pull on the interfacing to determine the direction of stretch.
2. If there is directional stretch:
    a. Place the pattern pieces which should not stretch (i.e., buttonholes) on the interfacing in the direction which does not stretch.
    b. Interface the garment, not the facings, unless the fashion fabric seems changed when the interfacing is applied.
3. (For **nonwoven** interfacing only) If there is no directional stretch or the pattern pieces do not require being placed in a direction in which there is no stretch, place pattern pieces on the interfacing as close together as possible, ignoring grain lines.
   (NOTE: Even though the pattern may suggest cutting away seam allowances, leave them on interfacing pieces. This insures that the interfacing will be sewn into the seamlines and will stay in place.)
4. Cut interfacing pieces.

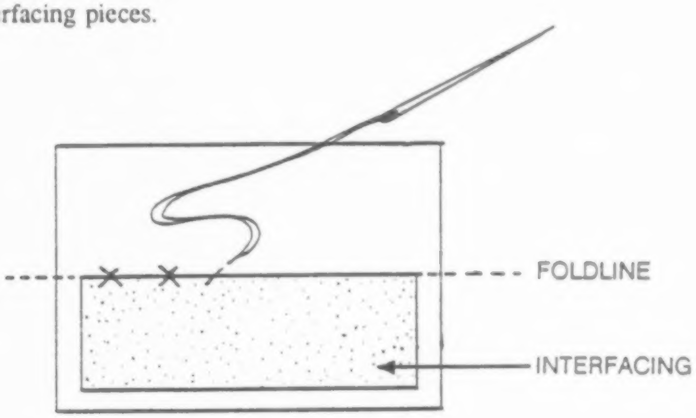


FIG. 4-8

5. On pieces where the interfacing is attached, such as the collar, cuff, or front facing, the pattern may suggest that the interfacing be cut only to the foldline. This will give a crisp edge and may be used if the edge will be topstitched or edgestitched. Catchstitch the interfacing to the garment at the foldline. ***(See Fig. 4-8.)***
6. For a garment or piece which will not be topstitched or catchstitched, leave the interfacing extended about 1/2" beyond the foldline. Baste interfacing to the garment with long, running stitches at the foldline. The basting thread must match the garment as it will not be removed.
7. Mark necessary construction points. These marks may include seamlines, shoulder seams, and points to be matched. Use a marking technique compatible with the interfacing and one which will not show through the fashion fabric. Follow the guidelines in the "Transferring Pattern Markings" section earlier for determining the proper marking tool.
8. If the interfacing is to be stitched into the seams, it is sometimes desirable to trim the corners before applying it. This eliminates bulk and keeps the corners sharp. To trim the corners, make a diagonal cut across the corner **to the outside where the seamlines meet at the corner.** ***(See Fig. 4-9.)***
9. To apply fusible interfacing, follow the instructions which accompany the interfacing.

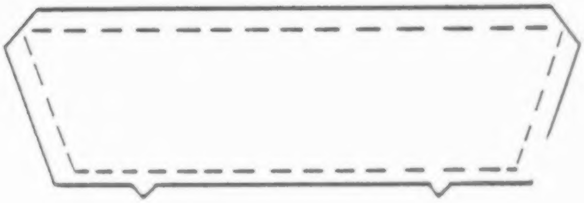


FIG. 4-9

10. Some fashion fabric, such as lightweight polyester or cotton, may look best if the interfacing is made from a woven fabric with the same qualities as the fashion fabric.
11. To apply light- and mediumweight sew-in interfacing:
    a. Pin interfacing to wrong side of fabric, matching seamlines and markings.
    b. Baste next to seamline in seam allowance or staystitch 1/2" from the edge.
    c. Stitch seams.
    d. Trim and grade seam allowances.
12. To apply heavyweight sew-in interfacing:
    a. Trim away all seam allowances.
    b. Pin interfacing to wrong side of fabric, aligning cut edges of interfacing along seamlines of garment.
    c. Baste in place.
    d. Catchstitch interfacing to garment along seamlines.
    e. Pin, baste, and stitch seams.

IV. Staystitching and stay-taping

(Objective 6; AS 4; JS 8, 9)

A. Terms and definitions

1. Staystitching--row of machine stitching which helps garment maintain its shape while being constructed
2. Directional stitching--stitching with the grain of the fabric to prevent stretching or changing the shape of the seam area ***(See Fig. 4-10.)***
3. Stay-taping--applying a piece of tape on a seamline to prevent stretching

B. Staystitching is used to provide stability in many areas.

1. On curved or bias edges on all fabric ***(See Fig. 4-11.)***
2. On all seams of fabrics that tend to stretch. These include single knits, some double knits, and loosely woven fabric.
3. On any seams that might stretch while a garment is being tried on
4. For any area where reinforcement is needed ***(See Fig. 4-12.)***

C. Guidelines for acceptable staystitching

1. The staystitching should not show when the garment is completed. (It is not removed.)

2. The staystitching must not change the size of the garment pieces.
3. Staystitching must be close enough to the seamline to be effective.

D. Characteristics of properly applied staystitching

1. On a single piece of the garment with matching thread
2. In the seam allowance, 1/8" from the seamline
   (NOTE: If the garment is cut with a 5/8" seam allowance, the staystitching will be 1/2" from the cut edge.)
3. With a regular machine stitch. The threads are clipped close to the fabric.
4. For reinforcement, with a very short stitch (20 stitches per inch) and so that the threads of the fabric will not unravel

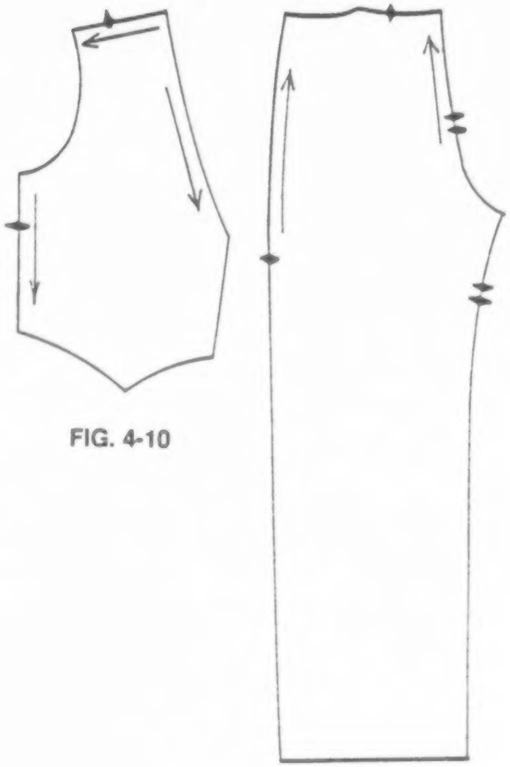


FIG. 4-10

E. Stay-taping provides stability:

1. To any seam which might stretch while being worn, thus causing the seam to break *(See Fig. 4-13.)*
2. On any area which might stretch during wear but where staystitching will not be effective
3. To areas which might wear more quickly than the remainder of the garment

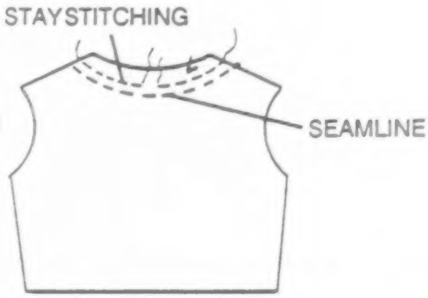


FIG. 4-11

F. Guidelines for acceptable stay-taping

1. The taping must not show when the garment is completed.
2. The taping must be done at the point where it will be the most effective.

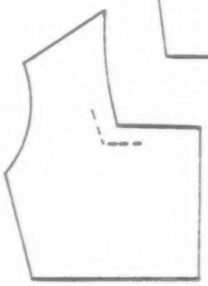


FIG. 4-12

G. Stay-tape is usually white cotton, linen, or polyester twill which can be purchased in different widths. If color match is important, or a lighter weight tape is desired, seam tape may be used.

(NOTE: If some rare instances where seam tape is not available in the correct color or would show through the garment, the selvage edge of the fabric may be used. The cut edge of the selvage **must be finished** before it is used.)

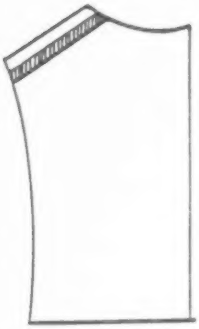


FIG. 4-13

H. Areas where stay-taping may be required

1. Shoulder seams on knits; any bias shoulder seam on a stretch fabric; a shoulder seam where one piece is cut on the bias and the other is gathered or pleated
2. Straight folds in stretchy fabric
3. Zippers in stretch fabric
4. Bias folds, such as pockets
5. Bias-faced pockets
6. Bias seams in pockets
7. Armholes
8. Raglan sleeves
9. Neck seams
10. Vents
11. Front edges of garments
12. Foldline of lapels
13. Waistlines

I. Procedure for staystitching

1. Unpin each pattern piece from the fabric. Handle the garment pieces carefully.
2. Staystitch the bodice front:
   a. At neckline from shoulder seam to center front; clip threads.
   b. From other shoulder seam to center front; clip threads.
   c. From neckline seam to armhole edge on both shoulder seams.
3. Staystitch comparable areas on bodice back.
4. Staystitch any other areas which require stability.

J. Procedure for stay-taping a foldline

1. Using the pattern as a guide, cut a piece of stay-tape the exact length of the area to be taped.
2. Pin the tape on the wrong side of the fabric along the foldline on the inside of the facing.
3. Stitch on the tape with a straight stitch. Clip threads. Measure the taped line to be certain it is the same size as the pattern line.

V. Constructing darts

(Objective 7; AS 5; JS 10)

A. Terms and definitions

1. Hand baste--to stitch the garment together by hand using long, running stitches
2. Pin baste--placing pins at right angles to seamline in seamline to hold fabrics together. Stitching is done while pins are in place.
3. Press cloth--fabric placed between the garment and the iron during pressing
4. Tailor's ham--an oblong, firmly stuffed cushion covered in fabric of half cotton, half wool. It is designed for use while pressing the curved areas of a garment.

B. Darts are intended to provide shaping and fullness in a garment. A well-constructed dart will be stitched with a sharp point and will be pressed so that there are no unplanned creases or folds and no pleat or bubble at the point. Darts should be turned in the correct direction according to the instructions in the pattern guide.

C. Procedure for making darts

1. Pin baste the dart by placing pins on the dart seamline and at right angles to it. Match snips or other marks, construction points, and dart seamlines. Place a pin about 1/4" to 1/2" beyond the point of the dart so that the point can be stitched without having a pin in the way. A pin-basted dart will look like ***Fig. 4-14***.
2. If the dart is to be hand basted for fitting a customer, begin at the wide end and hand sew with contrasting thread and small stitches along the dart line. Secure the basting at both ends. If machine basting for fitting, do not tie the threads or clip them close.
3. If the dart is to be hand basted and then stitched on the machine, the dart is pinned on the seamline and the basting is placed about 1/8" to the garment side of the dart seamline so that it can be more easily removed later.

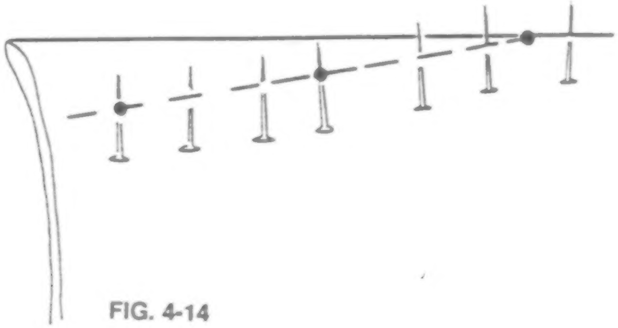


FIG. 4-14

4. To machine stitch a dart, first baste it in the preferred manner. Start at the wide end of the dart with a regular machine stitch following the seamline. When you are about 1/4" from the point, turn the hand wheel by hand for the last few stitches, running off the dart at the point and catching about two threads of the fabric.
5. When the dart has been stitched, examine the points from the outside. If they are acceptable, tie the threads at the points with a square knot and then with a slip knot.

Clip the threads near the knot. The wide end of the dart may be backstitched or secured with a cross seam.

D. Procedure for pressing darts

1. The dart should be pressed before it is crossed with another seam. Press the dart with the part of the tailor's ham that most resembles the part of the body the dart covers. For example, the large part of the tailor's ham resembles the hip area; the point or small rounded edge resembles the bust area.
   (NOTE: It is a good idea to stitch all darts at once and then press them at the same time.)
2. Place the dart flat on the ham and press the stitching and the fold. **Do not iron.** *(See Fig. 4-15.)*
3. Open the garment with the dart over the appropriate part of the ham and the outside of the garment on the ham. Darts are usually pressed toward the center or down toward the floor. (See the instructions in the pattern guide for the direction to press your specific dart.) Press the dart from the wide end to the point, using a press cloth. First press the dart to the side which is opposite the direction it will lie to crease it. Then turn the dart toward the center and press it again, using the press cloth, and pressing from wide end to the point.
   (NOTE: Do not lift the garment up at the point of the dart. This will make an undesirable bulge at the point of the dart.)

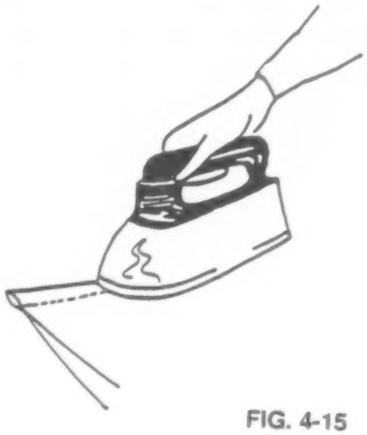


FIG. 4-15

4. Turn the garment right side up and position it on the tailor's ham. With the press cloth over the garment, final press the dart lightly. *(See Fig. 4-16.)*
5. Make all darts in this manner, unless the pattern guide gives you other directions. For example, some darts are cut on the foldline almost to the point and then pressed open. The point is pressed flat.

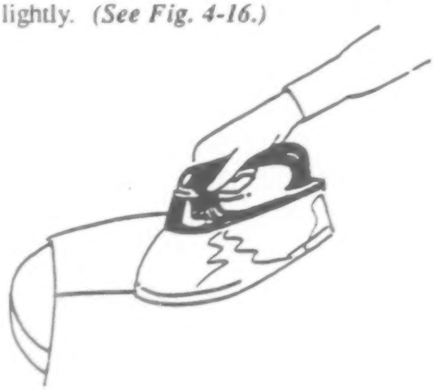


FIG. 4-16

VI. Constructing seams

(Objectives 8, 9; AS 6; JS 11)

A. Terms and definitions

1. Clip--snips made into seam allowance, especially for inward curves. Do not use on curves which have strain such as crotch seams and armhole edges.
2. Ease--squeezing a seam to fit evenly across another seam that is slightly longer
3. Finger press--flattening an area, such as a fold or seamline, with the fingers
4. Gathers--small, soft folds made by drawing fabric up on a line of hand or machine stitching
5. Grade--to remove bulk by trimming seam allowances to different widths
6. Point presser--piece of equipment shaped so that a right angle or sharp point can be easily pressed
7. Pounder or pounding block--smooth piece of wood used to flatten seams after pressing
8. Regular stitch--10 to 12 stitches per inch. Custom sewing may be done with 12 to 24 stitches per inch for a better appearance in some fabric.
9. Seam--stitching which holds two parts of a garment together (usually sewn on a seamline indicated on the pattern piece)
10. Seam board--piece of equipment used for producing flat seams, especially on wools
11. Seam finish--treatment of a seam to keep it from raveling or fraying
12. Trim--to cut off part of the seam allowance

B. Procedure for making shoulder seams

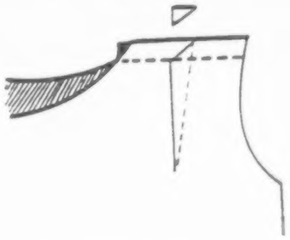


FIG. 4-17

1. Remove pattern pieces, staystitch, and complete darts.
2. Place pieces right sides together, matching notches and snips (or other markings). Pin baste, placing pins exactly on the seamline. This gives a guide for stitching and also assures that the garment fits together correctly at the seamline.
    a. Shoulder seams that have a dart in the bodice back should be placed with the armhole edges even. The neckline edges will meet **at the seamline.** Pin baste and stitch from armhole edge. Grade the dart in the seam by trimming from the shoulder seam to the wide end of the dart. ***(See Fig. 4-17.)***
    b. Many patterns have ease in the bodice back shoulder seam to allow for the curve of the shoulder. To ease the back seam, machine baste (about 8 stitches per inch) on the seamline in the area to be eased (usually marked with dots). As you pin baste the seam, pull the basting thread slightly to ease the excess length in the back seam. Do not create a pleat in the fabric. If the ease is slight, do not baste the seamline. Pin together with the front bodice side up and pull slightly on the front bodice shoulder as you stitch.
    c. Shoulder seams with gathers on the bodice front require a different treatment. Place two rows of machine basting (6-8 stitches per inch) on the bodice front shoulder. One row is placed 1/8" above the seamline; one row is placed 1/8" below the seamline. Leave about 2" of thread at each end of the stitching. ***(See Fig. 4-18.)*** Pin shoulder seams together at neck and armhole edges. Pin at each end of gathers. Pull both basting threads gently until the front bodice shoulder is gathered up to fit the back. Secure threads around pins in a figure eight. Distribute gathers evenly. Stitch on seamline between the two rows of basting. Remove the basting.
    d. For shoulder seams which have tucks or pleats in the front or back or both, follow the directions on the pattern guide before stitching the shoulder seams.

C. Procedure for pressing shoulder seams

1. Place shoulder seam on the tailor's ham and press seam open with the top of the iron. Press from neckline to armhole edge. Turn garment over for the final press, using the press cloth on the outside. If an imprint of the seam allowance shows through on the outside, place brown paper strips under the seam before pressing.
2. Shoulder seams which have gathers, tucks, or pleats may be pressed open or they may be pressed toward the back or front bodice. Follow the instructions on the pattern guide.

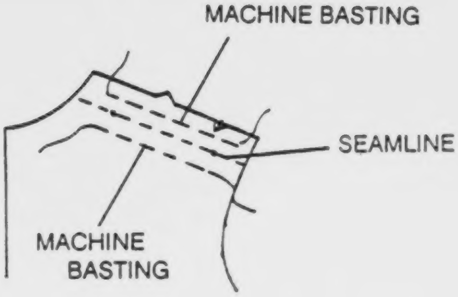


FIG. 4-18

D. If neckline is to be finished with a collar, facing, or binding, grade the shoulder seams at the neckline edge in a "V". *(See Fig. 4-19.)*

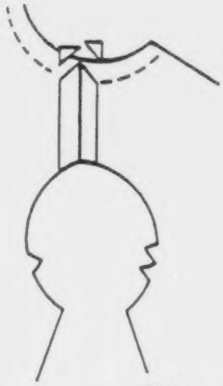


FIG. 4-19

E. For remaining seams, follow sequence in pattern guide. Press each seam before it is crossed by another seam.

F. Procedure for trimming, clipping, notching, or grading seams

1. **Trim** seam allowance to reduce bulk.
   - a. Trim seams which are enclosed, such as neckline seams in facings.
   - b. Trim to provide a better fit, such as the underarm part of the armhole seam.

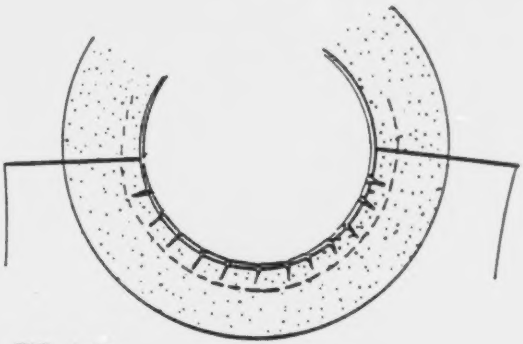


FIG. 4-20

2. **Clip** a seam if it is an inward curve, such as a neckline when a facing has been attached. *(See Fig. 4-20.)*

a. Make an extra row of reinforcement stitching, using 12-14 stitches per inch, along seams that will be clipped. Make clips between 1/2" and 1" apart into the seam allowance. Clip to, **but not through,** the seamline. The point of the scissors should clip to within two fabric threads of the seam. This allows room for the seam to expand into a straight line. Do not make clips in curved seams, or seams that will be under great strain, such as a crotch seam, unless a seam finish is applied to strengthen the seam.

3. A seam is **notched** when it is an outside curve, such as a round collar. Cut a series of triangles to about 1/8" from the seamline and out of the seam allowance at about 1" intervals. This removes the extra fullness from the seam allowance before it is turned into the collar. *(See Fig. 4-21.)*
4. A seam is **graded,** or layered, if there are several layers of fabric in one seam, such as a collar or a facing on a neckline. The seams are trimmed to decreasing widths with the largest close to the outside of the garment. *(See Fig. 4-22.)*

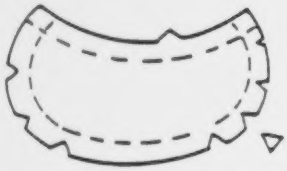


FIG. 4-21

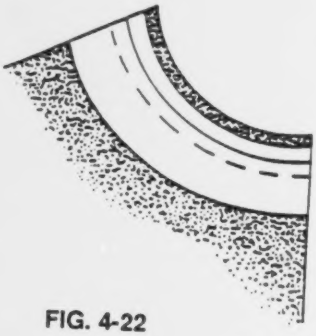


FIG. 4-22

G. Finishing seams

1. Seams can be overlocked, zigzagged, or overcast after the seam is pressed open. These finishes can be applied to the full 5/8" seam allowance or the trimmed seam allowance.
2. On some fabric, after the seam has been pressed opened, it may be closed again and overcast or zigzagged. This is usually done after the seam has been trimmed to a narrow width, as on the inseams on trousers.
3. Other seam finishes may be chosen, depending on the garment, fabric, and desired look. For example, a French seam is excellent for sheer fabric, unlined garments, and some lingerie.

H. Standards for a good seam

1. Stitching is straight or a smooth curve.
2. Correct thread tension is neither too tight nor too loose.
3. Fabric does not pull or pucker.
4. Seam allowances are flat and there are no unplanned creases.
5. If the seam has ease, there are no pleats.
6. Gathers, tucks, darts, etc., lie flat and smooth.
7. Seams are graded, trimmed, and/or finished correctly.

VII. Pockets

(Objectives 10, 11; AS 7; JS 12)

A. Terms and definitions

1. Hemmed patch pocket--single piece of fabric with hem at open edge of pocket and seam allowance turned under
2. In-seam pocket--This pocket does not show from the outside, but rather, is an opening in the side seam. It is generally made from lining fabric and may need to be reinforced with staystitching to prevent raveling.
3. Lined or faced patch pocket--A lining is attached to the pocket at hem edge and the pocket is finished by stitching and turning or by hemming lining to pocket.
4. Patch pocket--separate fabric piece attached to the garment
5. Piped pocket--The opening is covered by lips of fabric similar to a bound buttonhole. This type is used in tailored garments or as decoration.
6. Set-in pocket--pocket which is placed into an opening created in the garment by slashing
7. Welt pocket--hidden pocket with a visible slit. This may be a single or double welt and is sometimes covered with a flap.

B. Pockets are described by the method used for attaching them to the garment. Any pocket on a garment will be one of three types: patch, in-seam, or welt (set-in).

C. A **patch pocket** is applied to an area of the garment and is completely visible on the outside. It is usually made of the same fabric as the garment and cut on the same grain as the area to which it is applied, unless it is a decorative, striped, or plaid pocket, which may be cut on the bias or on horizontal grain lines. Patch pockets are often found on skirts and shirts.

1. The application method for the pocket will determine the width of the seam and whether the hem will be machine or handstitched. The method for reinforcing the corners must also be chosen before the pocket is applied. Both the application method and the reinforcement method should be in keeping with the overall look of the garment and appropriate for the fabric.
2. If the pocket is to be lined, the hem will not be stitched until after the lining is attached.
3. Topstitching on the pocket is not appropriate if there is no topstitching on the garment. Also, some fabrics will not take topstitching well. If there is no topstitching, the pocket will need to be applied invisibly.

D. Procedure for a topstitched, patch pocket

1. Press the seam allowance and hem in the pocket.
   (NOTE: To make a pocket the exact size and shape intended by the designer (or to make two or more pockets exactly the same size), it is helpful to make a lightweight, cardboard pattern of the finished pocket. Lay the cardboard pattern on top of the cut-out pocket piece and press the seam allowances around the pattern.)
2. If the pocket is curved, staystitch the curved areas very near the seamline. Notch the curved edges of the seam allowance to reduce bulk. ***(See Figs. 4-23 and 4-24).***
3. Complete the hem by hand or by machine so that the pocket seam allowance can be trimmed and inverted at the hem.
4. Miter the corners by making a diagonal fold where the corners meet. Stitch a 1/4" seam below the fold and trim the corner. Fold corner up and miter by folding inward. (See

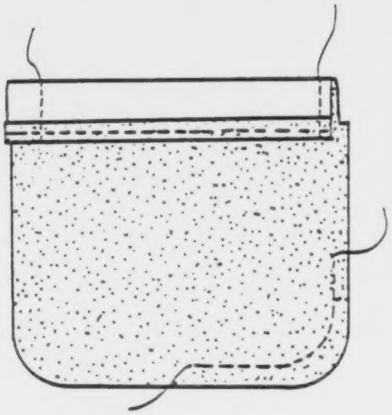


FIG. 4-23

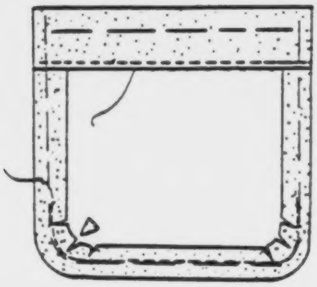


FIG. 4-24

Unit IV, Part 2, section VI, for mitering corners.)

5. Pin the pocket in place on the garment and stitch in place using one of the stitching patterns shown in ***Figs. 4-25 to 4-28.***

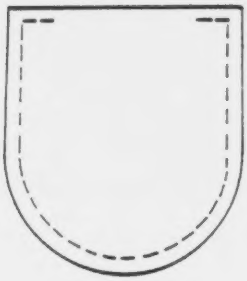


FIG. 4-25

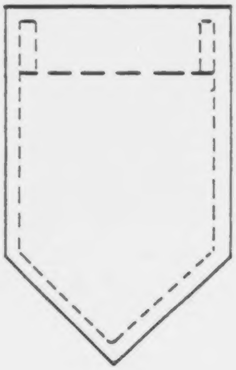


FIG. 4-26

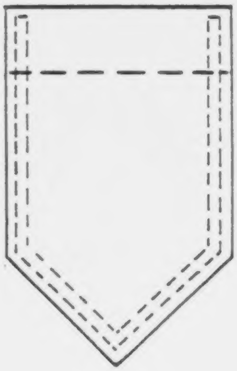


FIG. 4-27

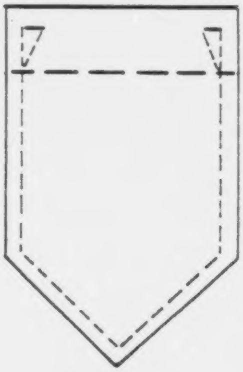


FIG. 4-28

E. Procedure for a lined or faced patch pocket

1. A lining is attached to a patch pocket at the hem. Trim the lining seam allowance 1/8" smaller than the seam allowance on the pocket. Turn under the seam allowances and press.
2. Fold the pocket and lining on the hemline and slipstitch the lining to the pocket. The seam allowances may be trimmed before slipstitching.
3. Attach the lined pocket by topstitching or topstitch decoratively and attach by hand. To handstitch the pocket to the garment, pin the pocket to the garment and make three small stitches at the top corner to reinforce the pocket corner. ***(See Fig. 4-29.)***
4. Then fold the garment away from the pocket and handstitch from garment to pocket to garment, making sure the stitches are vertical.

(NOTE: Vertical stitches enter the garment directly beneath the place where the thread came out of the pocket.)

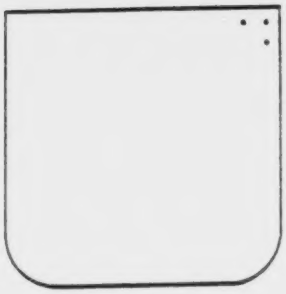


FIG. 4-29

VIII. In-seam pockets

(Objective 12; AS 7; JS 13)

A. An **in-seam** pocket is inserted directly into the seam--usually a side seam or a front side seam. These pockets may be sewn into the regular 5/8" seam allowance, or an extra tab may be added to the pattern extending from the seam allowance.

1. A matching fabric strip must be attached to the pocket when using a heavyweight fabric, a 5/8" seam, and a lighter weight fabric.
    a. Cut the pocket from lining fabric.
    b. Cut two straight strips of garment fabric about 2" wide and the length of the straight edge of the pocket.
    c. Turn under a seam allowance on the garment strip and stitch it to the right side of the pocket pieces so that they are a mirror image of each other.
    d. Follow the regular steps for attaching the pocket to the garment.
2. Attach the pocket to the garment seam allowance between construction points.
3. Press the seam toward the pocket and finish the seam.
4. Pin garment sections together and stitch the seam from construction point to the top, and from bottom to the construction point, leaving the pocket section open.
5. Pin the seamlines together in the pocket area. Pin the pocket sections together and stitch around the pocket sections.
6. Clip the back seam allowance to the construction point at the top and bottom of the pocket section.
7. Press the seam allowance open.
8. Finish the seams of the garment and the pocket sections.
9. Press pockets toward front of the garment.

B. Qualities of an acceptable in-seam pocket

1. The seamline at the pocket is smooth.
2. There is no difference in the length of the pocket openings.
3. The inside of the pocket is flat.
4. The seams are reinforced by backstitching to make the opening stronger.
5. The seamline of the pocket opening may be reinforced by taping.

IX. Welt and set-in pockets

(Objective 13; AS 7; JS 14)

A. A **set-in** pocket (sometimes called a piped pocket or a one-strip pocket) is similar in appearance to a bound buttonhole with two lips that are the same size and meet in the center. The lips on set-in pockets are made of the same fabric as the garment.

1. Mark the pocket opening by basting on the center line and about 1/2" beyond the finished edge. The pocket area may be reinforced on the back by placing a strip of muslin across the opening on the wrong side before putting in the basting.
2. On the fashion fabric strip, mark the stitching lines and the cutting line on the wrong side.
3. Place the fabric strip on the outside of the garment, matching the stitching lines and placing the cutting line of the strip on the hand basting line on the garment.
4. Stitch on the stitching lines, making sure the ends have the same number of machine stitches. This assures that both ends are the same width.
5. Cut the opening through both thicknesses with sharp scissors on the cutting line. Clip into the corners, but do not cut the stitching. ***(See Fig. 4-30.)***

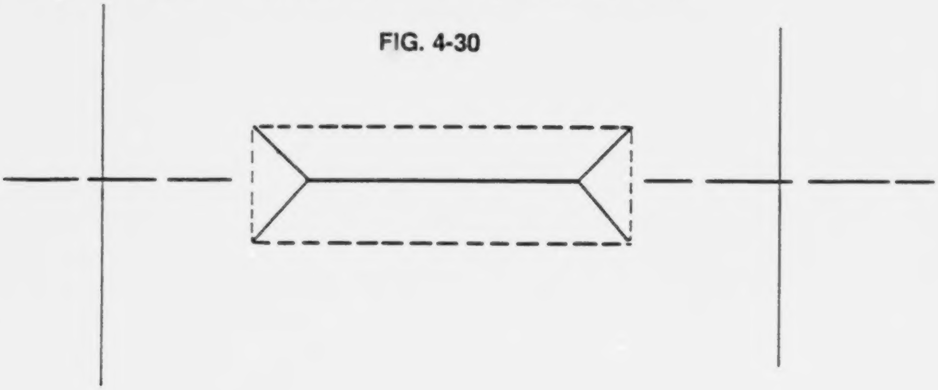


FIG. 4-30

6. Turn the strip to the inside, through the opening.
7. Press the strip over the lips as for a bound buttonhole. Secure top and bottom by stitching in the ditch.
8. Turn the garment away from the triangle and stitch the edge of the lips and triangle in place.
9. Baste the lips of the pocket together with a cross stitch or diagonal basting.
10. You are now ready to attach the pocket pieces to the strip. Stitch each pocket piece to the strip and press the top one down to meet the lower one with raw edges even.
11. Stitch the pocket sections together by turning garment back and first stitching over triangle. Continue stitching around pocket.

B. A **welt pocket** is made with the same procedure as the set-in pocket, with one exception. Instead of making two lips, fold one lip from the bottom to fill the whole pocket area. Press and proceed as for the set-in pocket. A welt pocket may have a completed welt that is cut and sewn separately and then attached.

1. The finished welt, which may be interfaced, is pinned to the outside of the garment at the bottom of the marked pocket opening and basted in place on the seamline.
2. Then stitch the pocket sections in place on the stitching line with the bottom section covering the finished welt.
3. Cut the garment on the cutting lines and turn the pocket sections through the opening.
4. The welt will cover the opening. Press the pockets and seams to the top and bottom.
5. Turn the top pocket down. Stitch pocket sections together, catching the triangles of the garment opening in the stitching.
6. Baste the welt in place.

X. Front-hip pockets

(Objective 14; AS 7; JS 15)

A. A side-front or **front-hip** pocket is constructed from a pocket section, which may be self-fabric or lining fabric, and a side-front section that must be self-fabric because it becomes a part of the main garment at the sides.

B. Construction procedure

1. Cut out front garment piece, pocket, and pocket facing.
2. Pin pocket facing to front of garment section, matching notches and seams.
3. With right sides together, stitch pocket facing to garment. Backstitch at side seam and waistline seam. Trim and clip seams.
4. Press seams toward facing and understitch close to seamline to prevent the facing from showing.
5. Press to inside.
6. Topstitch, if desired. (Not necessary if understitched)
7. Pin side front pocket in place, matching raw edges, markings, and notches.
8. Stitch the notched edge together.
9. Press pocket to inside and machine baste raw edges together at waistline and side hipline.

XI. Constructing collars, facings, and neckline plackets

(Objectives 15, 16, 17; AS 8; JS 16, 17)

A. Collar terms and definitions

1. Collar fall--part of the collar which covers the collar stand
2. Collar roll line--foldline between the collar stand and the fall; the line on which the collar turns
3. Collar stand--section of a two-part collar that lies against the neck
4. Convertible collar--may be worn open as a partial roll collar or closed as a standing collar with a fall
5. Flat collar--collar which lies flat against the garment (e.g., a Peter Pan collar)
6. Partial roll collar--in the back half (usually) of the collar which lies against the neck. The rest rolls over and covers the part which lies against the neck. The front of the collar lies against the body.
7. Standing collar--lies against the neck (e.g., a mandarin collar)
8. Undercollar--sometimes called a collar facing; finishes the collar and conceals raw edges
9. Upper collar--collar which shows on finished garment

B. Facing terms and definitions

1. Facing--piece of fabric attached to an edge of a garment and turned to lie flat against the garment on the inside
2. Lapel--sometimes called revere, the part of a shirt, dress, or jacket which turns back against the garment, especially front part of garment that folds back to form continuation of collar

3. Topstitching--machine stitching parallel to a seam or finished edge of a garment for decoration or to hold a crease on a folded or pressed edge of a seam; done from the right side
4. Understitching--stitching which holds seam to facing or under collar

C. Procedure for constructing and attaching a flat collar

1. A flat collar is usually made from one pattern piece that is used for both the upper and under collar. The interfacing is cut from the collar pattern and is usually attached to the under collar.
2. Place the interfacing on the under collar; attach, following directions in the pattern guide and for the type of interfacing being used.
   (NOTE: If the fabric is very sheer, an interfacing may also be applied to the upper collar.)
3. Place collar and under collar together, right sides facing, and pin baste. Stitch on seamline. Do not stitch the neck edge or turn yet.
4. Press seams open, using the point presser and seam board.
5. Trim corners at collar points or notch curved edges.
6. From the right side of the facing, understitch all seam allowances to under collar. Stitch as closely as possible into the corners.
7. If sew-in interfacing was used, trim very close to understitching.
8. Grade seams, trimming to about 3/8" and 1/4". The wider seam should be on the collar; the narrower seam on the under collar.
9. Turn collar right side out and press on the under collar side; use the point presser to press points. Final press with a press cloth on the collar side.
10. Topstitch the collar, if desired.
    (NOTE: The neckline edges of an understitched collar will not meet if the same pattern is used for both the upper and under collars. The understitching tends to make the seam roll slightly to the underside of the collar, which is desirable.)
11. If collar is not topstitched, hand baste the finished edge.
12. Machine baste the neckline edges.
13. Attach the collar between the facing and the garment.

D. Guidelines for constructing and attaching a partial roll collar

1. A partial roll collar has a fitted facing. It is otherwise constructed and applied in the same manner as a flat collar.
2. Some partial roll collars have lapels or reveres and are applied with a facing in the front. The seam allowance of the upper collar is turned under, and the neckline seam is enclosed in the collar. If this is the construction procedure recommended by the pattern guide, topstitching will be delayed until the collar and lapels are completed.

E. Guidelines for constructing and attaching a stand-up collar

1. The collar may be cut on the bias or may be shaped.
2. It may be applied with a fitted facing or with the neckline seam enclosed in the collar.
3. The final step of a stand-up collar may be done by hand or by machine.

F. Characteristics of a well-fitting and correctly made collar

1. The collar is the same size at center front and center back. The curves match.

2. Collars meet at the center front or center back.
3. The collar lies flat against the body or against the neck and has no ripples or tight spots.
4. The under collar does not show and does not pucker or bubble.
5. Understitching or topstitching is smooth and even.
6. Facings do not show unless they are intended to be seen (as in jacket lapels).

G. Characteristics of well-made facings

1. Facings are used to finish the edges of a garment in places such as the neckline, sleeve edges, armhole, and areas which contain buttons and buttonholes.
2. A facing may be fitted, shaped to the garment area where it will lie, or a strip cut on the straight grain or bias of the fabric.
3. A facing should be smooth, even in width, and neither too large nor too small for the area which is to be faced. Seams of fitted facings should match the garment seams. Whatever the type of facing, it should be anchored with invisible handstitching or with even topstitching. A facing should not be visible along the edge where it is attached.

H. Procedure for constructing and attaching a fitted facing

1. Interfacing may be attached to the garment, which is desirable if it is nonfusible, or to the facing, if it is fusible. Follow the directions for your pattern and interfacing.
2. Staystitch the neck edge of the facing to keep it from stretching out of shape.
3. If the facing is attached to the garment, finish edges before sewing shoulder seams. If the facing is to be sewn to the garment, finish the edge after the facing shoulder seams are constructed.
4. Stitch facing seams; press open. Trim facing seams to 1/8" smaller than the garment seams they match. (For example, if the garment's shoulder seams are not trimmed, the facing seam should be trimmed to 1/2" or less.)
5. Finish the unnotched edge of the facing before attaching it to the garment. If the fabric is likely to ravel, finish the edge. A curved edge can be stitched about 1/4" from the cut edge and turned under along the stitching line. Place the facing under the needle with the right side up and stitch close to the fold, turning under as you stitch. (This will eliminate pleats which often form on a curved edge.) On heavier fabric, cut notches in the edge before turning it under and stitching.
6. If the facing is a **bias binding,** it should show on both sides of the garment. It should be even in width and lie flat and smooth. If the binding has seams, they should be cut on the straight grain and joined with a narrow seam which is pressed open. Place the seam in an area which is not noticeable.
7. A **bias facing** is stitched to the right side of the garment, turned over the seam allowance, and the raw edge turned under on the wrong side of the garment. With narrow facings, the seam is trimmed to the width of the finished facing. With wide facings, the seam allowance is graded and turned to the inside of the garment.
8. A **double-bias binding or facing** is cut twice the width of the finished facing, plus seam allowance. The facing is folded lengthwise, and the two raw edges are stitched to the neckline. The folded edge is often turned over the seam allowance and handstitched or machine stitched by stitching in the seam (stitch-in-the-ditch).
9. If the bias binding covers an inside or an outside corner, a mitered corner is required. See Unit IV: Construction Techniques, Part 2, Section VI--Mitering Corners.

I. Guidelines for constructing a jacket collar and lapels

(Objective 18; JS 18)

1. The lapels should roll smoothly without a crease back onto the jacket.
2. A good quality interfacing or hair canvas must be used.
3. The traditional method of applying hair canvas and hand pad-stitching is still an excellent way to build in the desired roll. As the pad stitching is applied, the lapel is rolled over the hand, forming the curve.
4. Fusible interfacing is much quicker and should produce good results when applied properly.
5. Twill tape should always be applied along the roll line to reinforce it. It may be stitched either by hand or with a machine zigzag stitch.
6. The shaping is finished with steam.

J. Procedures for constructing a jacket collar and lapel

1. Cut interfacing--either fusible or hair canvas. If fusible interfacing is used, make a sample to see whether the edge of the interfacing shows from the front side of the fabric after it is fused. If it does, interface the entire front. Interfacing edges that will not be enclosed in seams should be cut with pinking shears so that the edge feathers into fabric.
2. On the interfacing, mark roll line at neck and jacket front. With a ruler, draw a line between the marks for taping. Use a pre-tested fabric marker or pencil.
3. Sew tape to roll line. With fusible interfacing, use a zigzag stitch 5/8" from neckline edge. With hair canvas, feather stitch or whip stitch, catching the tape as you sew. The tape should be stretched as sewn to help roll the lapel smoothly.
4. Trim off 3/4" at the corner of the lapel to eliminate bulk.
5. Sew twill tape and interfacing to jacket front on 1/2" seamline. Ease tape around corners.
6. By hand or machine, pad stitch interfacing to jacket front from roll line to edge of lapel.
7. Trim excess interfacing close to the stitching line, across shoulder, around neckline, and down the front of the jacket. Do not trim interfacing from sleeve area.
8. To finish shaping the lapel, place it over a padded surface or seam roll and steam. Shape the roll line with your fingers. Be careful that you do not touch the iron to your hand.
9. Let fronts dry thoroughly before handling again.

K. Procedure for constructing a neckline placket (shirt tab)

(Objective 19; JS 19)

1. A placket band is used for an opening that extends only part way down a garment.
2. To construct a placket band:
   a. Baste interfacing sections to wrong side of the band.
   b. Turn under seam allowances at sides and bottom edge; baste in place. Trim and press seam allowances.
   c. Pin the right side of the band to the wrong side of the garment front.
   d. Stitch along stitching lines. Pivot at corners.
   e. Clip diagonally into the corners. Trim seam allowances. ***(See Fig. 4-31.)***
   f. Turn placket to the right side of the garment. Press long seams toward the band and the triangle at the bottom down.

g. Fold the shorter side of the placket along the foldline, placing the basted edge over the seamline, and baste in place. ***(See Fig. 4-32.)***

h. Stitch close to the basted edge. Baste upper edges together at the neckline.

i. Fold the other side of the placket on the foldline and baste in place. Stitch. Be sure that you do not catch the first side of the placket in the stitching. Baste upper edges together. ***(See Fig. 4-33.)***

j. Place lower end of the placket band along the placement line and topstitch in place.

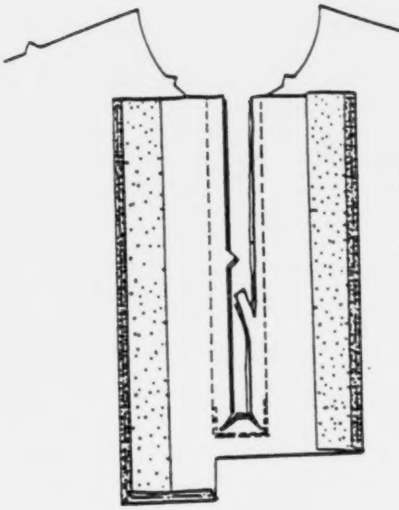


FIG. 4-31

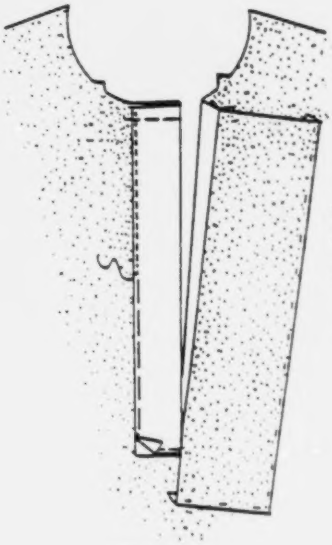


FIG. 4-32

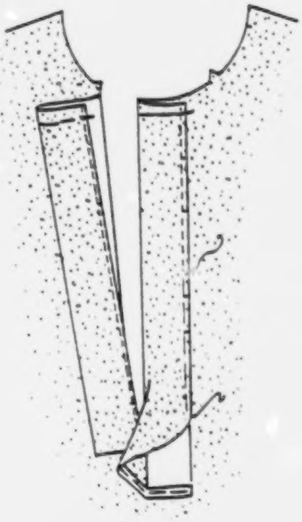


FIG. 4-33

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ASSIGNMENT SHEET 1--TRANSFER MARKINGS

Matching: Match each term with the descriptive phrase by writing the letter in the space provided.

a. Snipping
b. Washout marking pen
c. Tailor tacks
d. Dressmakers' carbon
e. All types of markings

___ 1. Can be used on outside of washable or non-washable fabric if pin or needle holes do not show

___ 2. Can be used on wrong side of fabric

___ 3. May be used with care on all fabrics

True or False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 4. Transfer every construction mark given on the pattern.

___ 5. Test the marking technique on a piece of the garment fabric before using it on the garment.

___ 6. Use the same type of markings for all fabrics.

___ 7. Test to see that dressmakers' carbon will wash out after pressing.

___ 8. Snipping is used only in seam allowances.

___ 9. A running basting stitch is acceptable for marking lines such as center front.

___ 10. Markings are usually transferred to the inside (wrong side) of the fabric.

___ 11. Washout markers may be used on washable fabrics.

___ 12. Markers are appropriate for use on both the wrong and right sides of fabrics.

___ 13. Permanent markings may be used on the outside of a garment.

___ 14. On bulky or very thick fabrics, use markers that will be visible during sewing.

___ 15. When marking with a washout marking pencil, mark dots and lines by folding back the pattern.

Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 16. Which is true when using a tracing wheel and carbon paper?

a. May be used on the right side of any fabric
b. Pad the table with a heavy cloth
c. Follow the lines exactly
d. Will show up on any fabric

___ 17. Which describes the use of tailor's chalk or pencil?

a. Should brush off after use
b. May be used on the right side of the fabric
c. May not stay on very long
d. All of the above

___ 18. Tailor's tacks are effective on which type of fabric?

a. Vinyl
b. Broadcloth
c. Leather
d. Satin

___ 19. Which is **poor** technique when using the tracing wheel?

a. Follow the line exactly.
b. Run the wheel over a line more than once.
c. Trace the lines so that they extend beyond the point.
d. Draw a horizontal line at the point of the dart.

___ 20. Which is true when marking with tailor's tacks?

a. Thread needle with a double strand of contrasting color thread.
b. Stitch through one layer of fabric at one time.
c. Leave tails on both ends of 3".
d. On darts, the tacks should be staggered.

Short Answer: Write a brief response to this statement.

21. Describe three categories of markings that may need to be transferred from your pattern to your fabric.

a.

b.

c.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ASSIGNMENT SHEET 2--UNDERLINING, INTERLINING, AND LINING

Matching: Match each term with its definition by writing the letter in the space provided.

a. Compatibility
b. Fashion fabric
c. Hand of fabric
d. Interlining
e. Lining
f. Underlining

___ 1. An inner layer of lightweight fabric cut from a special pattern and sewn separately from the garment

___ 2. The way in which the fabric drapes over the hand; the feel or the drapeability

___ 3. Having the same care qualities

___ 4. A layer of lightweight fabric basted to the fashion fabric and sewn as one

___ 5. A layer of fabric placed between the lining and the fashion fabric to give warmth and bulk

Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 6. Which does **not** describe the purpose of an underlining?

  a. Makes the garment easier to put on
  b. Adds support and helps the garment retain its shape
  c. Must have the same care qualities as the fashion fabric
  d. Helps prevent wrinkling
  e. Should not change the hand of the fashion fabric

___ 7. What should be done before cutting the fabric which will be made into a garment?

  a. Take non-washable fabric to a reputable dry cleaners.
  b. Wash and dry the underlining and the fashion fabric.
  c. Preshrink fabrics according to care labels.
  d. None of the above

___ 8. Select the step which is **not** appropriate when constructing the underlining.

  a. Cut the underlining fabric exactly as the garment was cut, including collars and facings.
  b. Baste the underlining to the lining fabric.
  c. Hand or tailor baste in the center of the garment and on the center line of darts.
  d. Staystitch around the edges to hold the two pieces together.

___ 9. Which does **not** describe an interlining?

a. Adds warmth to a garment
b. Is often added to a cotton skirt
c. Is sewn to the lining
d. May come bonded to the lining fabric

True/False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 10. The lining is used to hide seams and to provide a smooth interior surface so the garment is easier to put on.

___ 11. Lining fabrics should be contrasting in color with the fashion fabric.

___ 12. Cut the lining from the interlining pattern pieces.

___ 13. If the lining fabric ravels, finish the seams.

___ 14. The lining of a skirt or a pair of trousers may be sewn into the waistband seam.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ASSIGNMENT SHEET 3--INTERFACING

Matching: Match each term with its definition by writing the letter in the space provided.

a. Bias nonwoven interfacing
b. Dress fabric interfacing
c. Interfacing
d. Iron-on or fusible interfacing
e. Knitted interfacing
f. Nonwoven interfacing
g. Sew-in interfacings
h. Self-fabric interfacing
i. Weight of interfacing
j. Woven interfacing

___ 1. Interfacing cut from the fashion fabric; used when fashion fabric is very sheer

___ 2. Interfacing that stretches in all directions

___ 3. An inner fabric which provides support or body and shape retention to areas such as necklines, collars, and cuffs

___ 4. Fabric usually made of nylon tricot with lengthwise stability and crosswise stretch; suitable for some knit fabrics

___ 5. Fabrics designed for use in garments such as muslin, batiste, taffeta, organdy, percale, unbleached muslin, and some lining or underlining fabrics which are sometimes used for interfacing

___ 6. Interfacing which resembles felt and has no threads. Some types have directional stretch, and some may be cut in any direction.

___ 7. Interfacing with grain lines which must be considered when cutting

___ 8. Interfacing which must be stitched, by hand or machine, to the fashion fabric

___ 9. Refers to the firmness or lightness, stiffness or suppleness, of the interfacing; usually classified as light, medium, or heavy, and suitweight or outerwear.

Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 10. Which is **not** a function of interfacing?

a. It helps garment retain shape.
b. It keeps garment from being see-through.
c. It provides support for closings.
d. It provides body for collars, cuffs, etc.

___ 11. Which best describes guidelines for choosing interfacing?

a. It should require the same care as the fashion fabric.
b. It should not alter the hand of the fashion fabric unless stiffness or body is desired.
c. It should not stretch if stability is desired.
d. A stretch fabric will usually require an interfacing with some stretch.
e. All of the above

Short Answer: Write brief responses to these statements.

12. What kind of interfacing usually works best with the following fabrics?

a. Knit

b. Heavy woolen

c. Lightweight polyester

d. Sheer fabric

13. List at least three areas of a garment where interfacing may be required.

a.

b.

c.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ASSIGNMENT SHEET 4--STAYSTITCHING AND STAY-TAPING

True or False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 1. Staystitching holds several layers of fabric together.

___ 2. Staystitching is not removed from the garment.

___ 3. Staystitching should show when the garment is completed.

___ 4. Staystitching may change the size of the garment piece.

___ 5. Garments should be staystitched 1/4" from the seamline in the seam allowance.

___ 6. Staystitching is done on a single layer of fabric with contrasting thread and a basting machine stitch.

___ 7. Reinforcement staystitching is done on sharp turns with a very short stitch.

___ 8. Every garment will require some stay-taping.

___ 9. Twill tape, which is used for stay-taping, comes in a wide variety of colors.

___ 10. Stay-taping is used to provide stability, especially to areas which might stretch.

___ 11. The tape is removed before the garment is finished.

___ 12. A cut piece which includes the selvage may be used for stay-taping.

___ 13. The tape must not show when the garment is completed.

Short Answer: Write a brief response to the statement.

14. List five areas where stay-taping may be required.

a.

b.

c.

d.

e.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ASSIGNMENT SHEET 5--DARTS

True or False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 1. The dart is stitched on the dart stitching lines which have been matched.

___ 2. The point of the dart has a pleat at the end.

___ 3. The dart is pressed on a tailor's ham.

___ 4. Threads are tied at the point in two knots and clipped after the last knot.

___ 5. Points may be backstitched to be secured.

___ 6. Darts may be hand basted on the dart seamline for fitting.

___ 7. The handwheel of the sewing machine is turned by hand for a few stitches at the point of the dart.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ASSIGNMENT SHEET 6--CONSTRUCT SEAMS

Matching: Match each term with its definition by writing the letter in the space provided.

a. Clip
b. Ease
c. Finger press
d. Gathers
e. Grade
f. Point presser
g. Pounder or pounding block
h. Regular stitch
i. Seam
j. Seam board
k. Seam finish
l. Trim

___ 1. 10 to 12 stitches per inch; used for normal sewing

___ 2. Treatment of a seam to keep it from raveling or fraying

___ 3. Making snips in the same allowance, especially for inward curves

___ 4. To remove bulk by trimming seam allowances to different widths

___ 5. To cut off part of the seam allowance

___ 6. Squeeze, or slightly gather, a seam to fit evenly across another that is slightly longer

___ 7. Piece of equipment shaped so that a right angle or sharp point can be easily pressed

___ 8. Stitching which holds two parts of a garment together

___ 9. Small, soft folds made by drawing fabric up on a line of hand or machine stitching

___ 10. To flatten an area, such as a fold or seamline, with the fingers

Multiple Choice: Circle the correct word(s) in parentheses to correctly complete each statement.

11. If there are darts in the shoulder seamline, the front and back will fit together so that the (neckline edges / armhole edges) meet at the seamline.

12. To adjust for ease in the back shoulder seam, (machine baste / hand gather) on the seamline in the area to be eased.

13. If there are gathers on the bodice front, machine baste two rows of stitching (in the seam allowance / 1/8" above and below the seamline).

14. Basting stitches (must be removed / may remain in).

15. Generally, seams should be pressed (toward the back / open).

16. Shoulder seams (should / should not) be graded at the neckline if neckline is to be finished with a collar, facing, or binding.

Short Answer:

17. Why are seams trimmed?

18. Clip an ________ curve, such as a __________________.

19. Notch an ________ curve, such as a ___________.

20. Name three methods for finishing seams.

    a.

    b.

    c.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ASSIGNMENT SHEET 7--POCKETS

Matching: Match each term with its definition by writing the letter in the space provided.

a. Front-hip pocket
b. Hemmed patch pocket
c. In-seam pocket
d. Lined or faced pocket
e. Patch pocket
f. Piped pocket
g. Set-in pocket
h. Welt pocket

___ 1. Separate fabric piece attached to the garment

___ 2. Hidden pocket with a visible slit

___ 3. Pocket hidden in an opening in the side seam

___ 4. Pocket set into an opening created in the garment by slashing

___ 5. Single piece of fabric with a hem at the open edge and the seam allowance turned under

___ 6. Where a lining is attached to the pocket at hem edge and the pocket is finished by hemming lining to pocket

___ 7. Set-in pocket with the opening covered by lips of fabric

Short Answer: Write brief responses to these statements.

8. Name the three basic types of pockets.

   a.

   b.

   c.

9. When is topstitching on a patch pocket **not** appropriate?

10. In an acceptable in-seam pocket, the openings at the seamline are ____________.

11. Why must the side-front section of a front-hip pocket be of self-fabric?

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ASSIGNMENT SHEET 8--COLLARS AND FACINGS

Matching: Match each term with its definition by writing the letter in the space provided.

a. Collar fall
b. Collar roll line
c. Collar stand
d. Convertible collar
e. Flat collar
f. Partial roll collar
g. Standing collar
h. Under collar
i. Upper collar

___ 1. Collar which lies flat against the garment

___ 2. Collar which shows on finished garment

___ 3. Collar which lies against the neck

___ 4. Foldline between the collar stand and the fall; the line on which the collar turns

___ 5. Collar where half stands against the neck and the rest rolls over and down

___ 6. Collar that can be worn open as a partial roll collar or closed as a standing collar with a fall

___ 7. Part of the collar which covers the collar stand

___ 8. Sometimes called the collar facing; finishes the collar and conceals the seam

___ 9. Section of a two-part collar that lies against the neck

Multiple Choice: Circle the correct word(s) in parentheses to correctly complete each statement.

10. A flat collar is usually made from (one / two) pattern piece(s). The interfacing is usually cut from (the collar / a separate) pattern piece.

11. A partial roll collar has a (fitted / identical) facing.

12. A stand-up collar is (always / sometimes / never) cut on the bias.

Short Answer: Write brief responses to these statements.

13. List three characteristics of correctly constructed collars.

a.

b.

c.

14. What is the purpose of a facing?

15. Where would a facing be used?

    a.

    b.

    c.

16. What is the purpose of understitching?

17. Understitching is done from which side of the garment?

18. What areas usually require understitching?

19. What is a roll line?

20. Where does the roll line of the collar match the roll line of the lapel?

21. Why is the upper collar slightly larger than the under collar?

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET 1

1. c
2. d
3. a
4. F
5. T
6. F
7. T
8. T
9. T
10. T
11. T
12. F
13. F
14. T
15. T
16. c
17. d
18. b
19. b
20. a

21. Any of the following or equivalent:
    a. Darts, pleats, and tucks
    b. Placement lines for pockets, trims, ribbons, etc.
    c. Unusual seamlines

ASSIGNMENT SHEET 2

1. e
2. c
3. a
4. f
5. d
6. a
7. c
8. b
9. b
10. T
11. F
12. F
13. T
14. T

ASSIGNMENT SHEET 3

1. h
2. a
3. c
4. e
5. b
6. f

7. j
8. g
9. i
10. b
11. e
12. a. Knitted interfacing
    b. Heavyweight interfacing
    c. Lightweight interfacing
    d. Self-fabric interfacing

13. Any three of the following:
    Collar
    Cuffs
    Facings
    Under buttons
    Buttons

ASSIGNMENT SHEET 4

1. F
2. T
3. F
4. F
5. F
6. F
7. T
8. F
9. F
10. T
11. F
12. T
13. T

14. Any five of the following:
    Shoulder seams
    Straight folds in stretchy fabrics
    Zippers in stretch fabrics
    Bias folds (such as pockets)
    Bias-faced pockets
    Bias seams in pockets
    Armholes
    Raglan sleeves
    Neck seam
    Vents
    Front edges of garment
    Foldline of lapel
    Waistlines

ASSIGNMENT SHEET 5

1. T
2. F
3. T
4. T
5. F
6. T
7. T

ASSIGNMENT SHEET 6

1. h
2. k
3. a
4. e
5. l
6. b
7. f
8. i
9. d
10. c
11. neckline edges
12. machine baste
13. 1/8" above and below the seamline
14. must be removed
15. open
16. should
17. reduce bulk
18. inward / neckline, armhole
19. outside / collar
20. Any three of the following:
    Zigzagged
    Overlocked
    Overcast
    French

ASSIGNMENT SHEET 7

1. e
2. h
3. c
4. g
5. b
6. d
7. f
8. Patch, in-seam, welt (or set-in)
9. No topstitching on the garment
10. Smooth (or flat)
11. It becomes a part of the main garment at the sides.

ASSIGNMENT SHEET 8

1. e
2. i
3. g
4. b
5. f
6. d
7. a
8. h
9. c
10. One, the collar
11. Fitted
12. Sometimes

13. Any three of the following:
    a. The collar is the same size at the center front and center back. The curves match.
    b. The collars meet at the center front or center back.
    c. The collar lies flat against the body or against the neck and has no ripples or tight spots.
    d. The under collar does not show, pucker, or bubble.
    e. Understitching or topstitching is smooth and even.
    f. Facings do not show unless they are intended to be seen (as in the jacket lapels).

14. Facings are used to finish the edges of a garment.

15. Any three of the following: armhole edges, neck edges, sleeve edges, and areas containing buttons and buttonholes

16. It keeps the facing from showing; makes the seam roll slightly to the underside of the collar

17. The right side (outside)

18. Any area which is faced and cannot be seen from the outside

19. It is a line found on the under collar of a jacket and on the jacket front. A line where the collar bends.

20. At the neckline seam of both collar and lapel

21. So the under collar doesn't show. The upper collar must cover the under collar roll and must have extra fabric in order to do so.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 1--TRANSFER PATTERN MARKINGS TO GARMENT

Materials and equipment:

Completion of Assignment Sheet 1
Pattern and fabric cut out and pinned together
Marking tools
Flat surface
Test scrap of fabric

Steps of procedure:

1. Choose a tool for the desired marking.

2. Make a sample on the test scrap of fabric.

3. Evaluate test sample. If sample is not acceptable, go to step 4 below. If sample is acceptable, go to step 5 below.

4. Choose another tool for marking. Make a test sample. Go to step 3.

5. Transfer pattern markings to fabric following steps appropriate to tool chosen:

    a. Darts, pleats, tucks
    b. Placement lines for pockets, trims, etc.
    c. Unusual seamlines
    d. Any other unusual lines needed for construction of garment

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 2--ATTACH UNDERLINING TO GARMENT

Materials and equipment:

Completion of Assignment Sheet 2
Pattern and fashion fabric (cut out)
Underlining fabric
Basic sewing tools

Steps of procedure:

1. For the underlining, choose a fabric compatible with the fashion fabric.
2. Cut out the underlining pieces.
3. Mark the underlining.
4. Pin baste the underlining and the fashion fabric pieces together.
5. Tailor baste center and darts.
6. Staystitch.
7. Pin baste seams.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 3--ATTACH INTERLINING TO GARMENT

Materials and equipment:

Completion of Assignment Sheet 2
Pattern and lining fabric (cut out)
Interlining fabric
Basic sewing tools

Steps of procedure:

1. For the interlining, choose a fabric compatible with the fashion fabric and lining fabric.
2. Cut out the interlining pieces.
3. Mark the interlining where necessary.
4. Baste the interlining to the lining.
5. Machine stitch the seams of lining.
6. Trim interlining from garment seams.
7. Press seams open.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 4--ATTACH LINING TO GARMENT

Materials and equipment:

Completion of Assignment Sheet 2
Lining with interlining attached and necessary markings transferred
Basic sewing tools
Garment assembled from fashion fabric

Steps of procedure:

1. Begin to construct the lining by stitching the lining pieces together.
2. Press darts and seams open.
3. Finish seams, if necessary.
4. Pin lining into garment.
5. Sew lining to facings.
6. Attach lining to zipper, if appropriate.
7. Hem sleeves, if appropriate.
8. Hem lining at bottom.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 5--INVESTIGATE INTERFACINGS

Directions: Visit a local fabric shop and look over the types of interfacing the store has in stock. List as many different interfacings as you can find and note their characteristics.

1. a. Brand, name, identifying characteristics:

   b. Use on (type of fabrics):

   c. Use on (places on garments/products):

2. a. Brand, name, identifying characteristics:

   b. Use on (type of fabrics):

   c. Use on (places on garments/products):

3. a. Brand, name, identifying characteristics:

   b. Use on (type of fabrics):

   c. Use on (places on garments/products):

4. a. Brand, name, identifying characteristics:

   b. Use on (type of fabrics):

   c. Use on (places on garments/products):

5. a. Brand, name, identifying characteristics:

   b. Use on (type of fabrics):

c. Use on (places on garments/products):

6. a. Brand, name, identifying characteristics:

b. Use on (type of fabrics):

c. Use on (places on garments/products):

7. a. Brand, name, identifying characteristics:

b. Use on (type of fabrics):

c. Use on (places on garments/products):

8. a. Brand, name, identifying characteristics:

b. Use on (type of fabrics):

c. Use on (places on garments/products):

9. a. Brand, name, identifying characteristics:

b. Use on (type of fabrics):

c. Use on (places on garments/products):

10. a. Brand, name, identifying characteristics:

b. Use on (type of fabrics):

c. Use on (places on garments/products):

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 6--APPLY FUSIBLE INTERFACING TO GARMENT

Materials and equipment:

Completion of **Assignment Sheet 3**
Fabric pieces requiring fusible interfacing
Appropriate interfacing
Basic sewing tools

Steps of procedure:

1. Choose an interfacing compatible with the fashion fabric and style of garment.
2. Determine whether there is directional stretch in the interfacing.
3. Place the pattern pieces appropriately on the interfacing for cutting.
4. Cut out interfacing pieces, leaving seam allowances on.
5. Mark necessary construction points.
6. Trim corners, where appropriate.
7. Follow instructions to fuse interfacing to garment pieces.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 7--APPLY NONFUSIBLE INTERFACING TO GARMENT

Materials and equipment:

Completion of **Assignment Sheet 3**
Fabric pieces requiring non-fusible interfacing
Appropriate interfacing
Basic sewing tools

Steps of procedure:

1. Choose an interfacing compatible with the fashion fabric and style of garment.
2. Determine whether there is directional stretch in the interfacing.
3. Place the pattern pieces appropriately on the interfacing for cutting.
4. Cut out interfacing pieces, leaving seam allowances on.
5. Mark necessary construction points.
6. Trim corners, where appropriate.
7. For light- and mediumweight interfacing, pin to garment pieces and baste. For heavyweight interfacing, trim away seam allowances and baste in place. Catchstitch along seamlines.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 8--STAYSTITCH GARMENT/PRODUCT PIECES

Materials and equipment:

Completion of **Assignment Sheet 4**
Garment pieces cut out of fashion fabric
Basic sewing tools

Steps of procedure:

1. Staystitch bodice front:
   a. From one shoulder seam to center front
   b. From other shoulder seam to center front
   c. From neckline seam to armhole edges on both shoulder seams
2. Staystitch bodice back:
   a. From one shoulder seam to center back
   b. From other shoulder seam to center back
   c. From neckline seam to armhole edges on both shoulder seams
3. Staystitch any other appropriate areas.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 9--APPLY STAY-TAPE

Materials and equipment:

Completion of **Assignment Sheet 4**
Garment pieces cut from a knit fabric
Cotton, linen, or polyester twill tape
Basic sewing tools

Steps of procedure:

1. Cut a piece of stay-tape the appropriate size. (Use the pattern as a guide.)
2. Pin stay-tape to fabric.
3. Stitch tape and clip threads.
4. Measure taped line and compare with original pattern line.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 10--CONSTRUCT DART

Materials and equipment:

Completion of Assignment Sheet 5
Fabric with darts marked
Basic sewing tools

Steps of procedure:

1. Pin baste the dart, matching the construction points. Hand baste dart, if necessary.

2. Machine stitch dart.

3. Examine point from the outside. If unacceptable, remove stitching and go back to step 1. If acceptable, tie threads at the points.

4. Press dart.

    a. Use the correct part of the tailor's ham.

    b. Press from inside of garment first.

    c. Press in appropriate direction.

    d. Use a press cloth.

    e. Final press from outside of garment.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 11--CONSTRUCT SHOULDER SEAM AND GATHER/EASE FULLNESS INTO SEAM

Materials and equipment:

Completion of **Assignment Sheet 6**
Fabric cut out with bodice pattern having fullness to be gathered or eased into shoulder seam
Bodice pieces staystitched and darts completed
Basic sewing tools

Steps of procedure:

1. Machine baste to gather or ease in fullness.
2. Place pieces right sides together, matching notches and markings.
3. Place pins at neck and armhole edges. Pin at ends of gathers or ease stitching.
4. Pull up ease stitching or ends of gathering threads. Adjust gathers/ease. Pin.
5. Stitch.
6. Remove basting stitches.
7. Trim seam allowances and/or grade seam if appropriate.
8. Clip seam, if necessary.
9. Finish seam.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 12--CONSTRUCT A PATCH POCKET

Materials and equipment:

Completion of Assignment Sheet 7
Pocket cut from fashion fabric
Template
Garment with pocket placement marked

Steps of procedure:

1. Cut pocket from fashion fabric using pattern.
2. Press the seam allowance and hem under using template.
3. If pocket is curved, staystitch and notch seam allowance.
4. Complete hem, turn, and press.
5. If the pocket is squared, miter the corners.
6. Pin pocket in place on garment.
7. Stitch in place, using appropriate reinforcement method.
8. Topstitch.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 13--CONSTRUCT AN INSEAM POCKET

Materials and equipment:

Completion of Assignment Sheet 7
Four pocket sections cut from appropriate fabric
Garment with construction points marked

Steps of procedure:

1. Attach front and back pocket sections to front and back garment sections.
2. Press the seam allowance toward the pocket and finish the seam.
3. Pin garment sections together and stitch above and below construction points.
4. Pin seamlines together in the pocket area. Pin the pocket sections together and stitch.
5. Clip the back seam allowance.
6. Press seam allowances open.
7. Finish seams of garment and pocket sections.
8. Press pockets toward front of garment.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 14--CONSTRUCT A WELT POCKET

Materials and equipment:

Completion of Assignment Sheet 7
Pocket sections cut from appropriate fabric
Garment with construction points marked

Steps of procedure:

1. Mark the pocket opening by basting on the center line and about 1/2" beyond the finished edge.
2. On the fashion fabric strip, mark the stitching lines and the cutting line on the wrong side.
3. Place the fabric strip on the outside of the garment, matching lines.
4. Stitch on the stitching lines.
5. Cut the opening through both thicknesses.
6. Turn the strip to the inside.
7. Press the strip over the opening.
8. Stitch in the ditch to secure.
9. Stitch the edge of the lips and the triangle in place.
10. Baste the lips of the welt together.
11. Stitch the pocket pieces to the strip.
12. Press pocket pieces even.
13. Stitch the pocket sections together.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 15--CONSTRUCT A FRONT HIP POCKET

Materials and equipment:

Completion of **Assignment Sheet 7**
Shirt fabric and pattern using a front-hip pocket
Basic sewing supplies

Steps of procedure:

1. Cut out front garment piece, pocket, and pocket facing.

2. Pin pocket facing to front of garment and stitch.

3. Trim and clip seam. Press.

4. Understitch. Press.

5. Topstitch, if desired.

6. Pin pocket in place. Stitch.

7. Press pocket to inside.

8. Baste raw edges.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 16--CONSTRUCT A FLAT COLLAR WITH UNDERSTITCHING

laterials and equipment:

'ompletion of Assignment Sheet 8
'ollar pattern, fabric, interfacing
asic sewing supplies

teps of procedure:

. Cut out collar and collar facing.

. Cut out interfacing and attach.

. Stitch collar to facing.

. Press seam open.

. Trim corners.

. Understitch all seam allowances.

. Trim interfacing.

. Grade seams.

. Turn collar right side out and press.

0. Topstitch collar (if desired) or hand baste finished edge.

1. Machine baste the neckline edge.

2. Attach the collar.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 17--CONSTRUCT FACING

Materials and equipment:

Completion of Assignment Sheet 8
Facing for neck edge of garment
Fabric for interfacing
Garment
Basic sewing supplies

Steps of procedure:

1. Attach interfacing to garment or facing.

2. Staystitch the neck edge of facing.

3. Finish neck edge, if appropriate.

4. Stitch facing seams and press.

5. Trim facing seams.

6. Finish unnotched edge of facing.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 18--CONSTRUCT JACKET COLLAR AND LAPEL

Materials and equipment:

Completion of **Assignment Sheet 8**
Fashion fabric pieces for jacket, cut out
Underlining, etc., applied as needed
Hair canvas or fusible interfacing
Basic sewing supplies

Steps of procedure:

1. Cut out interfacing.

   (NOTE: If using fusible interfacing, check whether the cut edge line will show from the front of the fabric. If it does, cut interfacing for entire front of jacket.)

2. Mark interfacing.
3. Sew tape to roll line.
4. Trim corner of lapel.
5. Sew tape to 1/2" seamline on fronts.
6. Stitch interfacing to jacket front from roll line to edge of lapel.
7. Trim excess interfacing.
8. Steam fronts. Let dry.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 1

JOB SHEET 19--CONSTRUCT NECKLINE PLACKET (SHIRT TAB)

Materials and equipment:

Fabric and interfacing for placket
Basic sewing supplies

Steps of procedure:

1. Baste interfacing to band.
2. Turn under seam allowances on band. Stitch, trim, and press.
3. Pin band to garment front.
4. Stitch.
5. Clip corners and trim seams.
6. Turn placket to right side of garment. Press.
7. Fold short side of placket along foldline and baste. Stitch. Baste upper edges together.
8. Fold other side of placket on foldline and baste. Stitch. Baste upper edges together.
9. Place lower end of placket band and topstitch in place.

Custom Sewing

Construction Techniques, Part 2
Unit IV

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
F21	1			9	20		
F22	2				21		
F23	3			9	22		
F24	4			9			
F26	5			9	23		
F4	6			10	24		
F27	7				25		
F28	8			11	26		
F29	9			11	27		
F30	10			11	28		
F31	11				29		
F32	12			12	30		
F33	13			12	31		
F34	14			12	32		
F35	15				33		
F36	16				34		
F37	17				34		
F38	18		1	13			
F39	19		2, 3	14, 15			

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to accomplish all the steps necessary to construct garments. Competencies will be demonstrated by correctly performing the procedures outlined in the Assignment and Job Sheets.

SPECIFIC OBJECTIVES

After completion of this unit the student should be able to:

1. Based on the content outline, CONSTRUCT A SLEEVE PLACKET by completing Assignment Sheet 9 and Job Sheet 20.
2. Based on the content outline, CONSTRUCT A SLEEVE CUFF by completing Job Sheet 21.
3. Based on the content outline, CONSTRUCT SET-IN SLEEVES by completing Assignment Sheet 9 and Job Sheet 22.
4. Based on the content outline, CONSTRUCT KIMONO SLEEVES by completing Assignment Sheet 9.
5. Based on the content outline, CONSTRUCT RAGLAN SLEEVES by completing Assignment Sheet 9 and Job Sheet 23.
6. Based on the content outline, PUT IN A HEM by completing Assignment Sheet 10 and Job Sheet 24.
7. Based on the content outline, CONSTRUCT PANTS CUFFS by completing Job Sheet 25.
8. Based on the content outline, CONSTRUCT A PLEAT by completing Assignment Sheet 11 and Job Sheet 26.
9. Based on the content outline, CONSTRUCT A TUCK by completing Assignment Sheet 11 and Job Sheet 27.
10. Based on the content outline, CONSTRUCT A RUFFLE by completing Assignment Sheet 11 and Job Sheet 28.
11. Based on the content outline, CONSTRUCT A WAISTBAND by completing Job Sheet 29.
12. Based on the content outline, CONSTRUCT BELT LOOPS AND CARRIERS by completing Assignment Sheet 12 and Job Sheet 30.

13. Based on the content outline, CONSTRUCT A CASING by completing Assignment Sheet 12 and Job Sheet 31.

14. Based on the content outline, CONSTRUCT A LINGERIE STRAP GUARD by completing Assignment Sheet 12 and Job Sheet 32.

15. Based on the content outline, MITER CORNERS by completing Job Sheet 33.

16. Based on the content outline, BASTE GARMENT TOGETHER FOR FITTING by completing Job Sheet 34.

17. Based on the content outline, FIT GARMENT by completing Job Sheet 34.

18. Based on the content outline and Handout 1, REMOVE SPOTS AND STAINS by completing Assignment Sheet 13.

19. Based on the content outline and Handouts 2 and 3, PRESS COMPLETED GARMENT by completing Assignment Sheets 14 and 15.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Provide students with Objective Sheet.

C. Discuss Unit and Specific Objectives.

D. Provide students with Information Sheet.

E. Discuss the Information Sheet.

(NOTE: Illustrations are included in the text materials so that the student will have them to refer to while working on individual projects. If desired, teachers may enlarge these for transparencies.

F. Provide students with Handouts, Assignment and/or Job Sheets.

1. Assignment Sheets 9-12, 14, and 15 may be used as part of a Unit Test, if desired.
2. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

G. Integrate the following activities throughout the teaching of this unit.

1. Introduce the unit by explaining the terminology provided on the Information Sheet.
2. Collars and lapels
    a. Demonstrate the construction of a jacket collar and lapel.
    b. Provide samples of a variety of collars.
3. Sleeves
    a. Provide examples of several types of sleeves, sleeve plackets (e.g., on men's shirts), and shirt cuffs.
    b. Demonstrate procedure for making a kimono sleeve and a raglan sleeve.
    c. Demonstrate correct pressing techniques for sleeves.
4. Demonstrate or show samples of the different kinds of pleats, tucks, and ruffles. Also, demonstrate or show samples of hem finishes when there are pleats in the garment.

H. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Handouts

1. HO 1--Stain Removal Guide
2. HO 2--Pressing Equipment
3. HO 3--Pressing Guide

F. Assignment Sheets

1. AS 9--Sleeves, Gussets, Plackets, and Cuffs
2. AS 10--Hems
3. AS 11--Pleats, Tucks, and Ruffles
4. AS 12--Couture Touches
5. AS 13--Remove Spots and Stains
6. AS 14--Pressing Techniques
7. AS 15--Pressing Equipment

G. Answers to Assignment Sheets

H. Job Sheets

1. JS 20--Construct a Sleeve Placket
2. JS 21--Construct a Sleeve Cuff
3. JS 22--Construct a Set-in Sleeve
4. JS 23--Construct a Raglan Sleeve
5. JS 24--Hem Garment/Product
6. JS 25--Construct Pants Cuffs
7. JS 26--Construct a Pleat
8. JS 27--Construct a Tuck
9. JS 28--Construct a Ruffle
10. JS 29--Construct a Waistband
11. JS 30--Construct Belt Loops and Carriers
12. JS 31--Construct a Self-band Casing
13. JS 32--Construct a Lingerie Strap Guard
14. JS 33--Miter Square Corner
15. JS 34--Baste and Fit Garment

REFERENCES

(NOTE: Also see Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

INFORMATION SHEET

I. Constructing sleeve plackets, sleeve cuffs, and sleeves

(Objective 1; AS 9; JS 20)

A. Terms and definitions

1. Continuous lap--single piece of fabric used for placket facing
2. Cuff--lower part of sleeve which contains the fullness and fits more closely to part of arm where it falls
3. Dropped shoulder--shoulder seam that is lowered to hang down over the top of the arm
4. Gusset--inset of triangular shaped fabric used to give more room or to make a bias area stronger (e.g., kimono sleeve or crotch area)
5. Kimono sleeve--sleeve cut out with bodice as one piece
6. Placket--opening which makes room in a part of a garment so that the garment may be put on
7. Pressing mitt--small piece of equipment that fits over the hand; can be placed inside the sleeve for steaming
8. Raglan sleeve--a sleeve, with dart or seam on top, which includes part of the shoulder of the garment
9. Set-in sleeve--a sleeve placed in a regular armhole
10. Shrink--to use steam and heat to decrease the size of an area by causing threads of fabric to draw together
11. Sleeve board--small pressing board providing a flat surface on which to press sleeve seams open
12. Sleeve cap--the curved upper part of the sleeve between notches on a pattern, which allows for fit at top of upper arm

B. Procedure for constructing a continuous lap placket

1. Reinforce the placket by stitching on the marked stitching line. Use 12 to 15 stitches per inch; near the point, use 20 stitches per inch. At the point, stop with the needle in the fabric, turn, and take two stitches across the point; leave the needle in the fabric; turn again; and continue down the other side, matching the number of stitches per inch. Slash placket to stitched point. Do not cut stitches. *(See Fig. 4-34.)*

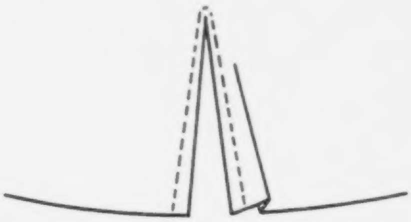


FIG. 4-34

2. Cut a straight strip of fabric twice the length of the placket and about 1-1/2" wide (or follow pattern instructions).

3. Place right side of strip to right side of sleeve placket. Pin to reinforcement line. At the point of the placket, the seam on the strip will be about 1/4" wide, but the seam on the sleeve will be only as wide as the stitching line. The seamline on the strip must be placed on the straight grain of the placket. ***(See Fig. 4-35.)***

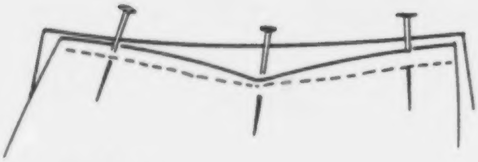


FIG. 4-35

4. Stitch along the reinforcement stitches to the point of the slash. Leave the needle in the fabric and raise the presser foot. Spread the slash and place the strip along the lower edge. Lower the presser foot and continue stitching down the other side.

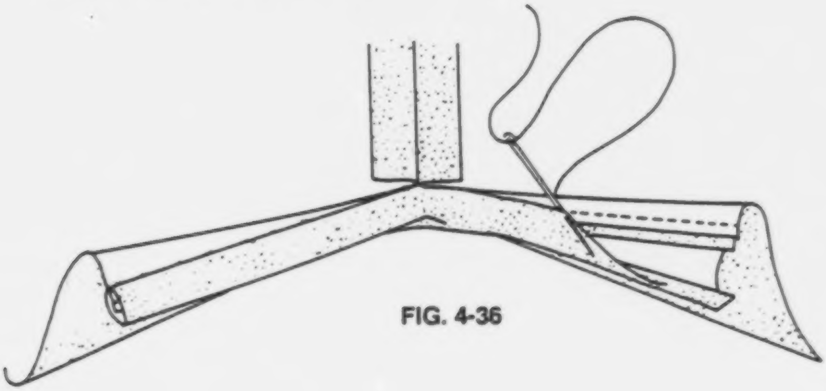


FIG. 4-36

5. Press the seam toward the placket.
6. Turn under about 1/4" of the unstitched edge of the strip and press.
7. Fold the placket in half and put the pressed edge just over the stitching line, enclosing the raw edge. Pin in place and stitch very close to the fold (by machine or by hand). ***(See Figs. 4-36 and 4-37.)***
8. Press the placket so that the overlap is against the sleeve and baste. When closed, the underlap is covered by the overlap. Stitch across the turned placket in a V to hold it inside the shirt smoothly. ***(See Fig. 4-38.)***

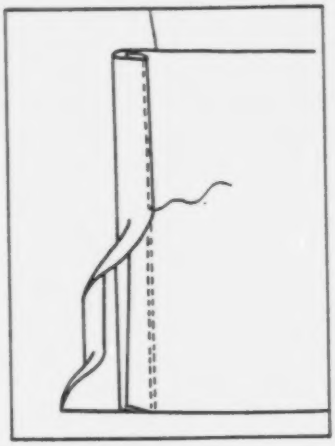


FIG. 4- 37

C. Procedure for constructing a cuff with a facing

(Objective 2; JS 21)

1. Press under a seam allowance of slightly less than 5/8" on the cuff facing.
2. Place cuff and cuff facing right sides together, and stitch three sides on the seamline. Grade seam and notch corners, except those which will be attached to the sleeve.
3. Understitch the bottom edge of cuff. Turn cuff to right side and press.

4. Place cuff and sleeve with right sides together. Pin matching notches and construction points. Stitch on sleeve side. Press seam into cuff. Trim seam and baste cuff facing over seam. Press.
5. Topstitch from the right side (if desired), stitch-in-the-ditch, or slipstitch cuff facing in place. Press.

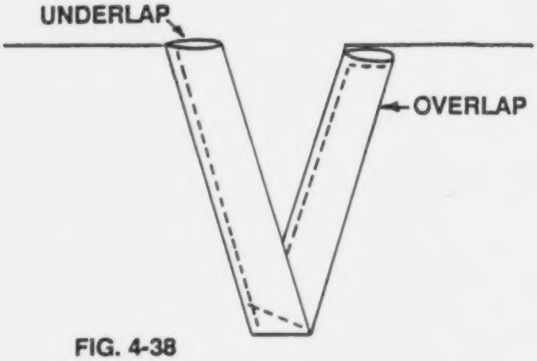


FIG. 4-38

D. Procedure for constructing sleeves and attaching them

(Objectives 3, 4, 5; AS 9; JS 22, 23)

1. There are three basic types of sleeves: set-in, raglan, and kimono.
   a. The set-in sleeve is most common and most difficult to construct.
   b. Characteristics of a properly fitting set-in sleeve
      (1) The top of the cap touches the top bone of the shoulder.
      (2) There is enough room to pull arms forward and upward.
      (3) The grainline from the top to the bottom is at right angles to the floor.
      (4) The crosswise grainline is parallel to the floor.
      (5) The length is comfortable for the wearer and allows the elbow to bend without the sleeve becoming too short.
      (6) The sleeve hangs without wrinkles and puckers.
   c. Finish the sleeve--cuffs, plackets, hems--before inserting it into the armhole, unless there is doubt about the finished length. To check for finished length, baste the sleeve into the armhole on the seamline and check fit.
   d. Machine baste on the seamline of sleeve cap from notch to notch using 8-10 stitches per inch.
   e. Turn the bodice inside out; leave the sleeve right side out. Place the sleeve into the bodice, match the underarm seam, and pin, inserting the pins on the seamline. Match construction points at top of sleeve to shoulder seam or construction point at shoulder on the bodice. Pin.
   f. Draw up ease by pulling gently on basting threads. Secure with a figure 8 over a pin. Distribute ease, placing very little at the top of the cap and more where the sleeve is on the bias. Be sure that there are no pleats.
   (NOTE: It helps to roll the armhole over your hand with the sleeve side up and place pins every 1/4" as you move the ease.)
   g. Machine baste sleeve just outside the seamline, about a pin's width, into the seam allowance.
   h. Steam the sleeve seam allowance to shrink out fullness. Remove pins and try on garment.
   i. If fit is acceptable, stitch sleeve in place. Stitching may be done from the garment side to achieve a smoother curve. Beginning at a notch, stitch just inside the basting line on the seamline under the arm, around the cap, and back to the notch. Stitch again from notch to notch under the arm about 1/4" from the seamline.

j. Trim seam from notch to notch under the arm. Trimming allows sleeve to fit closely under the arm and makes the sleeve fit and look better.

k. If there are any pleats in the sleeve seam, clip the thread and roll sleeve over hand, using thumbnail to smooth out pleat. Stitch again.

l. Remove basting. If the seam does not need a finish, trim seam of sleeve to 3/8" and bodice to 1/2". If seam is to be finished, trim both seam allowances to about 3/8" and overcast by machine or serger.

m. Turn seam into sleeve unless your pattern guide specifies otherwise. Place pressing mitt or end of sleeve roll into cap and steam from right side. Do not allow iron to touch seam. Finger press seam, but do not iron.

n. If shoulder pads are to be used, they are put in at this time. Follow the directions in the pattern guide and in Section V, F, which follows.

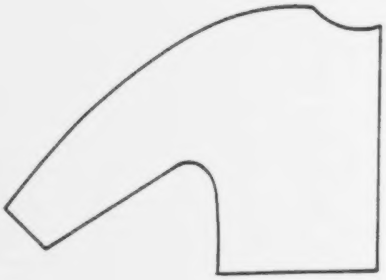


FIG. 4-39

2. The **kimono** sleeve has a seam on top of the sleeve that is a continuation of the shoulder seam. The sleeve and bodice are cut together, without seams between them. ***(See Fig. 4-39.)*** This is a very loose-fitting sleeve that requires more fabric than a set-in sleeve. It may require a shoulder pad to look best. To construct, sew only the diagonal seams and complete the underarm and bodice side seams in one pass. A kimono sleeve curve should be clipped and pressed open.

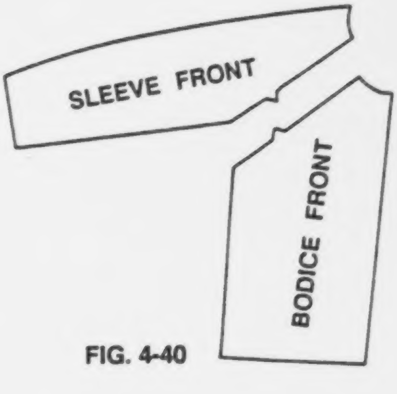


FIG. 4-40

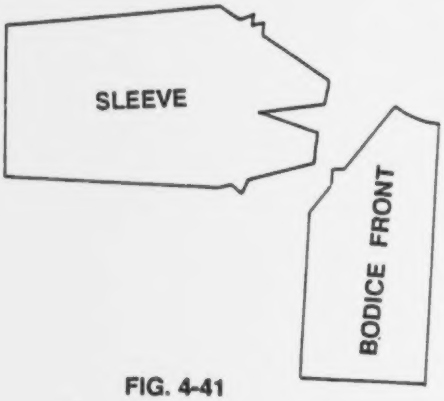


FIG. 4-41

3. A **raglan** sleeve can also be a loose-fitting sleeve. It usually has a seam or dart at the top of the shoulder, and a part of the neckline area is usually included in the sleeve design. Two types of raglan sleeves are illustrated. ***(See Figs. 4-40 and 4-41.)***

4. To construct the raglan sleeve, either sew the sleeve seam and insert it, much like a set-in sleeve, or sew only the diagonal seams and complete the underarm and bodice side seams in one pass, as in the kimono sleeve. ***(See Fig. 4-42.)***

5. A **draped shoulder** sleeve is a set-in sleeve with part of the sleeve cap included in the bodice and the sleeve seam falling below the natural shoulder.

II. Hems and pants cuffs

(Objectives 6, 7; AS 10; JS 24, 25)

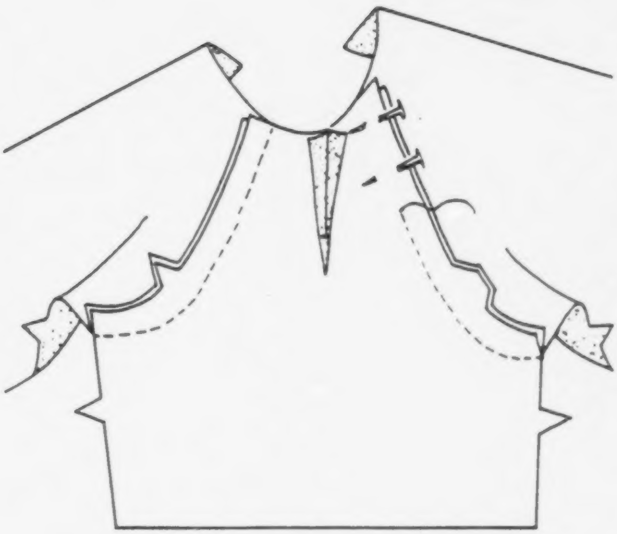


FIG. 4-42

A. Terms and definitions

1. Blindstitch--hand- or machine stitch used for hemming and holding facings in place. This stitch is invisible (or almost invisible) on the outside of the fabric.
2. Catchstitch--cross stitch used to hold raw edges in place securely; a stable and secure stitch used in areas where edges need to be flat; particularly good for heavy fabrics
3. Cuff--wide hem made by turning the fabric back against the garment. On a sleeve, additional fabric may be added, finished, and then turned up or buttoned. On slacks, extra fabric in the length is turned up and tacked at the seams.
4. Hem--edge finish formed by folding under the raw edge and stitching it by hand or machine
5. Machine hem--hem that is completely stitched by machine, usually at 10 stitches per inch. This may be a machine-made blind hem, a narrow-rolled hem, or a topstitched hem. It is found on sportswear and home decorator items such as curtains, bedspreads, and slipcovers.
6. Slipstitch--tiny, invisible handstitch taken through a fold of fabric; used for hemming skirts, attaching pockets, finishing off waistbands, putting lining in coats and suits, and tacking facings to a garment
7. Tailor's hem--special hem used in bulky and heavy fabrics that do not ravel
8. Vertical hemming stitch--durable, stable stitch best suited to hems where hem edges are finished with hem tape or stretch lace. This is an invisible hem on the outside. Only very small stitches show on the inside.

B. The hem is usually the last step before finishing a garment.

(NOTE: Sleeve hems can be completed before the sleeve is inserted if the length has been determined. On a skirt or trousers, the hemline must be established after the garment is completely fitted. All skirts and trousers should hang finished for at least 24 hours before the hemline is determined.)

C. Standard for an acceptable hem

1. It should not show unless it is machine stitched, in which case the stitching may be part of the garment design.
2. The hem depth should be uniform and determined by the style of the pattern and the type of fabric.

3. Hand or machine stitches should be a uniform distance apart, usually about 1/2".
4. The stitches should be loose enough so that the hem doesn't draw, but not so loose that they are easily caught when the garment is worn.
5. Hems should be flat and smooth. No imprint should show from pressing.
6. Excess fullness should be removed; seams should be notched. Any finish used on the edge should be flat, smooth, and not draw in the garment.

D. Procedure for establishing the hemline

1. Have the customer put on the garment. All plackets and openings should be properly closed and belts should be in place. The customer should wear shoes that will be worn with the garment. Ask the customer to stand naturally with arms and hands extended slightly away from the body so as not to touch the garment.
2. With the customer, decide on the distance from the floor by loosely pinning the hem and having the client look in the mirror. Remove the pins.
3. Measure from the floor with a yardstick or hem marker. Place pins horizontally at the foldline. Ask the customer to move around slowly and check the line again with the yardstick.
4. If marking trousers, mark each leg separately to adjust for any difference in leg length.
5. Have the customer remove the garment. Place it on a flat surface. Turn up the hem on the pinned foldline and check for irregularities, adjusting for curves or straight lines as needed. Double-check the side seams and front to back. Match seams, center lines, and pleat lines. Pin or baste 1/8" from fold. Check length on person or dress form. (Note that a client who has figure irregularities or an unusual stance may have an irregular hem. Make a note of this on the customer's record.)

E. Procedure for finishing hem

1. Use a gauge to measure the hem depth. The narrowest point in the hem will determine the maximum hem depth. You do not have to use the hem depth suggested on the pattern. Measure and mark or pin the distance from the fold to the hem depth all the way around. Cut hem on that line.
2. On a bias hem, apply a row of machine gathering stitches near outside edge. Pull up on this thread until the width of the cut edge is the same as the area against which it will lie. This easing can best be done on the ironing board. Steam lightly if the fabric will shrink from steaming.
3. If a tape or stretch lace is used, the fabric may be eased as it is sewn or pinned on to the tape. **Be sure the hem edge is not tighter than the garment.**
4. Finish the edge and pin or baste the hem in place.
5. Hem the garment with the desired stitch. Remove the basting and final press from the wrong side with a press cloth.

F. Custom-made garments may take advantage of special touches (couture finishes) which help to distinguish them from ready-to-wear.

1. A very sheer fabric, cut on the straight grain with a straight full hem, may look better with a doubled wide hem (6" to 12"). This will require an extra 6" for turning under and 6" for the hem.
2. A finish called a Hong-Kong seam will make an attractive hem on an underlined garment. Cut a bias strip of underlining about 1" wide and the length of the bottom of the garment. (Join where necessary or make continuous bias--see Unit VI.) Stitch the

bias onto the right side of the garment with a 1/4" seam. Press bias up. Turn bias over raw edges and stitch-in-the-ditch to hold in place. Hem with a tailor's hem only to underlining.
(NOTE: For a tailor's hem, stitch raw edge to back, pull bobbin thread to ease up fullness, fold upper edge back, and sew hem to garment with invisible stitches, being careful not to pull stitches too tightly.)

3. Weights in the hems of very lightweight or very heavy garments give a professional look.
4. Wide, circular skirts may be hemmed with bias horse-hair or a rolled hem for a narrow, flat, flexible hem.
5. Blindstitching on the machine may be used for a durable hem in a raincoat or washable coat.
6. A hemmed corner can be mitered.
7. A hem interfaced with a bias strip of muslin can give a soft, padded look. For a more padded look, use a strip of cotton flannel or even lamb's wool in a trapunto-stitched hem.
8. A lace edge, rolled hem, or shell edge can give a dainty finish, which is especially nice on lingerie.

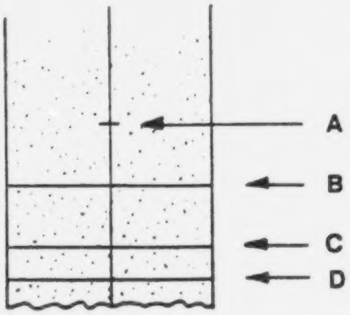


FIG. 4-43

G. Procedure for constructing a hemmed cuff

1. Measure and mark the hemline as in any other garment (point a).
2. Measure and mark the depth of the cuff (line b). This is the foldline on the garment.
3. Determine the depth of fabric needed to cover the cuff when turned up, plus the hem (line c).
4. Cut the hem so that there is enough to stitch the hem in place but so the hem will not show when the cuff is turned. ***(See Fig. 4-43.)***
5. Turn pants inside out. Fold up along line b. ***(See Fig. 4-44.)***
6. Sew along line d, using a regular machine stitch.
7. Fold cuff up along line c. Press. Tack in place at the side seam or inseam.

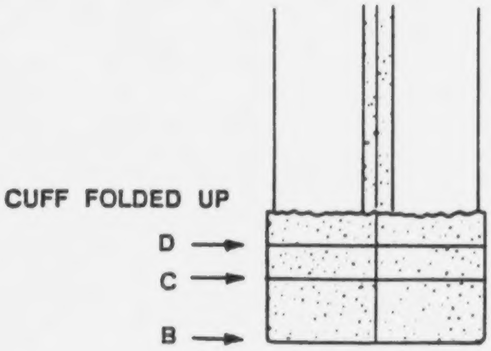


FIG. 4-44

III. Pleats, tucks, and ruffles

(Objectives 8, 9, 10; AS 11; JS 26, 27, 28)

A. Terms and definitions

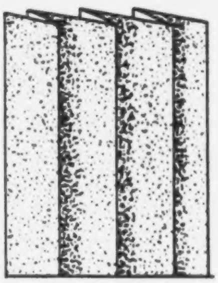
1. Accordion pleats--very narrow pleats which are pressed along the entire length of the garment. The folds resemble an accordion.
2. Blind-tucks--when the fold of each tuck touches or overlaps the next, covering the stitching line
3. Box pleats--two side pleats which turn away from each other
4. Circular ruffle--ruffle cut in a circle. Fullness is created when the inner curve of the circle is straightened.

5. Dart or released tuck--tuck used to control fullness or shape. The fold is formed on the inside, stitched to a designated point, and then released.
6. Inverted pleats--two side pleats which are turned toward each other and meet
7. Knife or side pleats--series of pleats that turn in the same direction, are equal in width (usually), and are pressed straight to the hem
8. Pin tuck--tiny, narrow fold stitched very close to the foldline
9. Pleat--fold in the fabric made by doubling the fabric over on itself, resulting in three thicknesses of fabric. It is used to control fullness in a garment.
10. Ruffle--band of fabric, either hemmed or doubled, that is gathered or pleated and applied to a garment's edge for trimming or decoration
11. Spaced tucks--where there is a predetermined space between each tuck
12. Straight ruffle--where fullness is cut in a strip and gathered using two to three times the length of the edge it will be sewn to

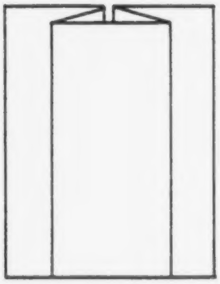
B. Pleats are named by the way they are folded or stitched. They can be stitched part way down on the inside or topstitched. There are four well-known variations, used either singly or in series: knife or side pleats, box pleats, inverted pleats, and accordion pleats. ***(See Fig. 4-45.)*** The pleat is the top part which shows when the garment is completed. The pleat underlay is the part which folds against the pleat and lies behind it. ***(See Fig. 4-46.)***

C. Procedure for constructing pleats

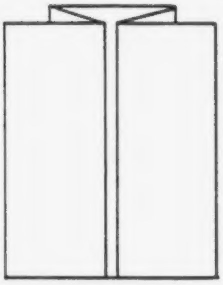
1. Crease the fabric on the pleat foldline; pin or baste it to make a straight fold.
2. Lap the basted foldline to the second line of the pleat underlay and pin in place.
3. Baste the length of the pleat--baste the entire length for pressed pleats; baste to the bottom of the stitching area for unpressed pleats.
4. Baste each pleat. Measure the distance between the pleats and the depth of the fold to be sure they are all the same.



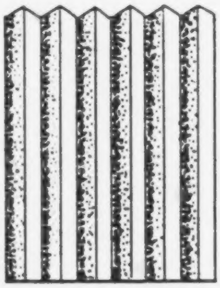
SIDE (KNIFE) PLEATS



BOX PLEATS



INVERTED PLEATS



ACCORDIAN PLEATS

D. Tucks are usually used for decoration, although they are sometimes used to release fullness in a garment--especially at the bustline from the shoulder seam or at the waistline.

E. Standards for tucks

1. A tuck should be stitched with thread that matches the fabric very well.
2. The stitching should be straight.

3. The tucks should be the same distance apart.
4. Tucks should be pressed as they are sewn. This helps ensure that they are the same distance apart and the same depth.
5. Most tucks are placed on the right side of the garment and pressed away from the center line.

F. Procedure for making a tuck

1. Fold and pin baste the tuck on the foldline. If necessary, hand baste on the foldline.
2. Match the stitching lines and pin or hand baste.
3. Stitch the tuck nearest the center first.
4. Press each tuck after it has been stitched. Press on the right side with a press cloth. Measure the distance between tucks and the width of the tuck as each is stitched. If there is a difference, correct it at once or every tuck stitched afterward will be wrong.

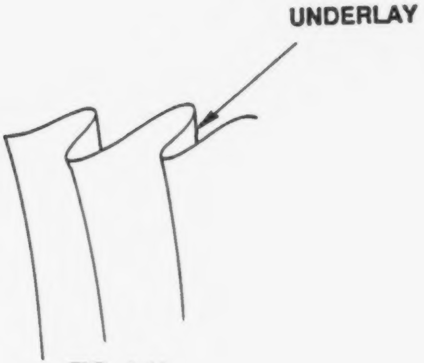


FIG. 4-45

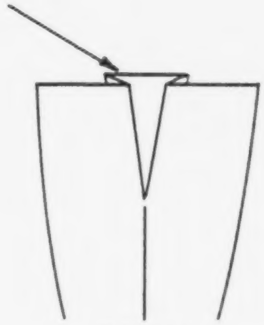


FIG. 4-46

G. Ruffles are for decoration. They can be attached to the inside seam or attached on the outside with a heading. Ruffles are always gathered and should be cut on the lengthwise grain or the true bias for the best effect.

H. Procedure for constructing a ruffle and attaching to an inside hem *(See Fig. 4-47.)*

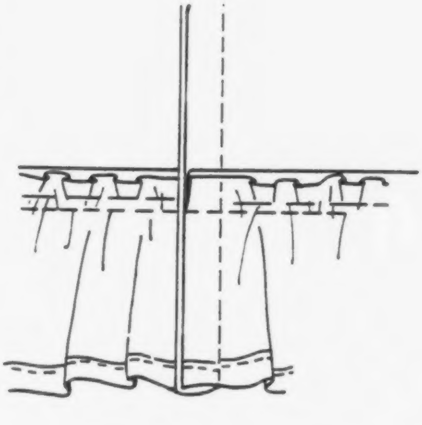


FIG. 4-47

1. Cut the ruffle to the desired length and width. Sew into a circle. If seaming is required, the seams must be finished.
2. Hem the ruffle or finish the edge. If the ruffle is made from a sheer fabric, it can be doubled, thus eliminating the need for a hem.
3. Fold ruffle section in half the long way and mark center with a pin or appropriate marker. Fold again and mark quarter points.
4. Gather the ruffle on the unfinished edge.

(NOTE: To gather large lengths of fabric, set machine for a medium-width zigzag stitch. Lay a buttonhole twist sized thread or cord over the seamline and zigzag over the thread. Do not catch the thread in the stitches. Cut sewing threads. Pull up on cord to adjust gathers. After sewing, pull cord out of fabric.)

5. Pin baste the ruffle to the garment section, matching half and quarter points. (Locate these points by folding.) Adjust fullness.
6. Stitch ruffle to garment section, ruffle side up.
7. Finish seam and turn seam toward garment.

I. Procedure for constructing a ruffle with a heading *(See Fig. 4-48.)*

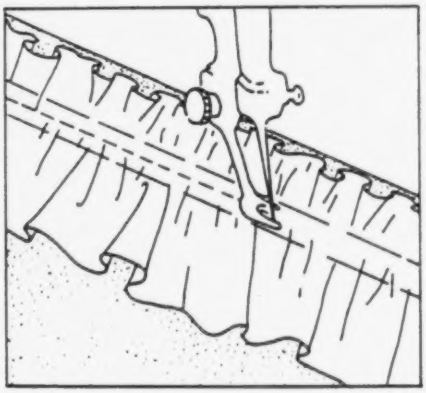


FIG. 4-48

1. Cut the ruffle to the desired length and width plus seam allowance. Sew into a circle. If seaming is required, the seams must be finished.
2. Hem both edges of the ruffle.
3. Fold ruffle section in half the long way and mark center with a pin or marker. Fold again and mark quarter points.
4. Gather the ruffle along the line that will be attached to the seam allowance of the garment.
5. Pin baste the ruffle to the garment section, matching half and quarter points. (Locate these points by folding. Sometimes, they may be the center front and back and the side seams.) Adjust fullness.
6. Stitch ruffle to outside of garment, ruffle side up.

IV. Constructing a waistband

(Objective 11; JS 29)

A. The waistband should fit snugly at the natural waistline.

B. The waistband should have an extension at the end for placement of buttons or hooks and eyes.

C. The upper edge of the skirt or slacks should be approximately 1/2" to 3/4" larger than the waistband to allow for easing over the hipline.

D. A waistband is usually cut on the lengthwise grain.

E. Using the selvage for one edge eliminates bulk when turning under the inside seam allowance.

F. To cut a waistband without a pattern, cut fabric the length of the waist measurement plus 2-1/2" for the seam allowances and overlap. Cut the width twice the finished width plus seam allowances.

G. All fitted waistbands are interfaced to give body and prevent stretching. Use a medium to heavy interfacing and cut half the finished width. Several alternative products are available to give body to the waistband.

H. Waistbands in lightweight single or double knit

1. Finish raw edge at top of skirt or slacks with a suitable seam finish.
2. Turn down and sew to the garment with a straight or narrow zigzag stitch. Leave an opening, insert elastic, and sew opening closed.

I. Waistbands in heavier knit fabric

1. Cut self fabric 3" wide for 1" elastic in the direction of the most stretch and 1" longer than the measurement of the hipline.
2. Press wrong sides together.
3. Cut elastic long enough to pull over hips, but snug. Sew into a circle.
4. Insert elastic into the waistband. With a zipper foot, stitch through both layers of fabric and close to the elastic but not catching it.
5. Divide waistband into fourths and match with quarter points on garment. Pin in place.
6. Sew waistband to waistline with a zigzag or overcast stitch. Trim off excess and press seam down.

J. Procedure for constructing an applied, woven fabric waistband

1. Cut the waistband 2-1/2" longer than the waistline measurement. If the selvage is used instead of one long seam allowance, it will become the inside edge.
2. Cut interfacing or waistline stiffening half the finished width of the waistline.
3. Fuse interfacing or stitch stiffening to back of waistband.
4. Fold waistband, right sides together. Stitch ends and grade seams. One end will form the extension.
5. Turn right side out and press.
6. Pin to right side of garment. If necessary, ease in extra fullness.
7. Baste waistband in place and check fit, if necessary.
8. Stitch waistband on, keeping underside free.
9. Grade the skirt seam allowance, but not the waistband seam allowance.
10. Turn waistband to underside. If selvage was used, it will lie flat with the outside edge against the stitching line; if a seam allowance was added, turn it under. Slipstitch in the ditch or topstitch.
11. Apply button and buttonhole or large skirt-type hook and eye and a small support snap or hook and eye to prevent band from shifting at closure.

V. Couture touches

(Objectives 12, 13, 14; AS 12; JS 30, 31, 32)

A. Terms and definitions

1. Belt carriers--self-fabric strips attached to waistband or side seam of garment to hold a belt in place
2. Belt loops--strips made of self-fabric or thread
3. Casing--a tunnel made to enclose elastic or a drawstring
4. Couture--sewing or needlework; the product of a dressmaker
5. Lingerie strap guard--a holder constructed inside the garment to keep lingerie straps from falling off the shoulders
6. Shoulder pad holders--a cover of garment fabric to hold a shoulder pad or a fastening to attach pad to garment and remove it easily
7. Waistband--part of a skirt, dress, or trousers fitted about the waist and made from a separate garment piece

B. Couture touches are added construction features that separate custom garments from factory-made ones. Some ready-to-wear garments, especially the more expensive ones, may contain some couture features, but seldom as many as you can put into a custom-made garment. Couture touches are often small, but they add a great deal to the quality of the garment. Many more exist than are listed here; examine the way that expensive garments are finished and check the references given at the beginning of this unit.

C. Waistline finishes

1. **Ribbon-faced waistband:** The front of a conventional waistband may be covered with a length of ribbon to give it an individual and special look. This can be anything from a piece of grosgrain ribbon to an imported French or English woven ribbon. The ribbon may be edge-stitched onto the waistband before or after it has been applied to the garment.
2. **Ribbon-faced waistline:** Sew a piece of grosgrain ribbon to the waistline, right sides together, leaving 5/8" of ribbon at each end. Fold ribbon to inside and press. Fold ends of ribbon to clear zipper and slipstitch in place. Tack invisibly to seams and darts.
3. **Self-band casing:** This may be used at the waistline, on sleeves, or on other areas.
   a. If garment has a self-band, the band should be twice the width of the elastic plus about 3/8" to turn under.
   b. Cut the elastic 1" to 2" shorter than the waist measurement, depending on the amount of stretch.
   (NOTE: Test for stretch by measuring a piece of elastic, zigzagging it to a piece of the fabric, and measuring it again. The stretch is the difference between the first and second measurements.)
   c. Divide the elastic into fourths by folding and marking, leaving 1/2" for overlap. Place the marks at the center front, back, and side seams, 1/4" down from the upper edge of the extension. Pin in place.
   d. Stitch in place with a wide zigzag along the lower edge of the elastic, stretching the elastic to fit as you sew. ***(See Fig. 4-49.)***
   e. Turn fabric and elastic to inside, folding at the stitched edge of elastic. Turn under the raw edge and stitch through the elastic and the extension, stretching as you stitch. ***(See Fig. 4-50)***

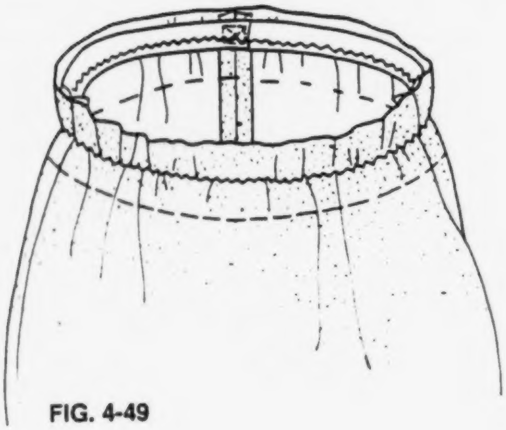


FIG. 4-49

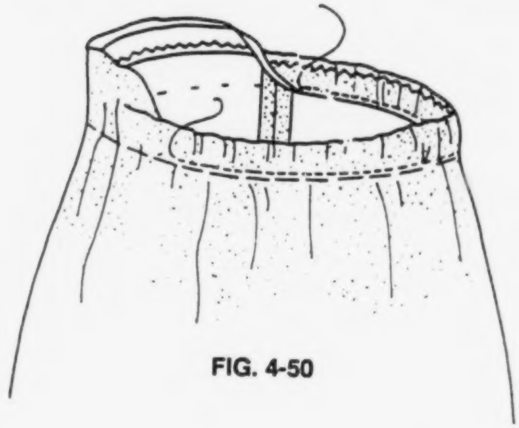


FIG. 4-50

4. If the garment is made from a knit fabric, a separate band may be used for the casing.
   a. Sew the elastic to the band, as in steps c and d above. Be sure to leave 1/4" to 3/8" of band above the edge of the elastic.
   b. Fold the band in half, wrong sides together, and pin to the waistband, matching quarter points. Sew through both thicknesses of the band and through the garment, stretching the waistband as you sew.
   c. Turn band up, trim seams, and press down. You may stitch again through all thicknesses to hold the seam down, stretching waistband while stitching.
5. **Waistline ribbon stay:** This finish is applied to dresses with center back zippers to take the strain off the zipper at the waistline.
   a. Cut 1/2" wide grosgrain ribbon the length of the waistline plus 2-1/2".
   b. Allow 1/2" of ribbon for the underlap and 2" for the overlap at the placket. Mark the quarter points.
   c. Pin baste the ribbon to the waistline seam on the skirt side with the edge of the ribbon about 1/8" below the waistline seam.
   d. Hand baste ribbon to waistline seam just above the stitched waistline seam.
   e. Stitch on bodice side, just above the waistline seam, leaving edge free 1/2" from zipper on both sides. ***(See Fig. 4-51.)***
   f. Trim waistline seam allowance to 1/8" below finished edge of ribbon. Trim seams and darts to a V to reduce bulk.
   g. Stitch trimmed seam to upper edge of ribbon, leaving edges at zipper opening free on both sides. Turn under end of ribbon at zipper underlap on right side of center back seam. Handstitch it to the zipper tape.
   h. Hem the 2" extension of ribbon and sew a hook on it. Lap across the zipper and sew an eye on the ribbon where it meets.

D. Belt loops and carriers

1. To attach a crocheted or chain-stitched loop at the side seams of a dress, thread a large needle with the chain. Bring the chain through the side seam, from wrong to right side, at the desired spot above the waistline seam. Go back into the side seam below the waistline seam. Anchor the chain well at both spots. Repeat on other side.

2. Procedure for constructing fabric carriers and attaching them to the garment
   a. The length of each carrier will be the belt width or the waistband width plus 1". Carriers can be wide or narrow, depending on the fabric and personal preference.
   b. Using the selvage as one long edge, cut a strip three times the finished width and the length required for all the carriers for the garment. Fold the strip in thirds with the raw edge inside.

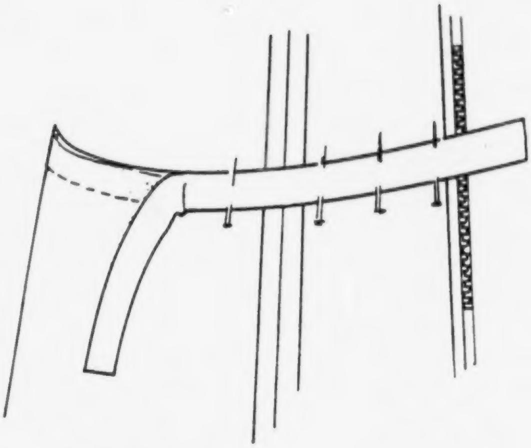


FIG. 4-51

   c. Press carrier strip. With selvage down, topstitch both long edges.
   d. Cut strip into desired lengths.
   e. To attach to a dress or coat, fold under 1/4" at each end and press. Attach by hand or topstitch on each end.
   f. To attach carriers to a waistband, position them where required on the waistband **before** the waistband is sewn to the garment. Leave a slight ease in carrier for smooth insertion of belt.

E. A lingerie strap guard is used to keep straps in place so they do not show. Ribbon, seam tape, or a crocheted chain may be used. The strap is placed on the inside of the shoulder seam and fastened with a snap fastener.

1. Cut tape, ribbon, or chain about 1-1/2" long for each strap. Fasten by hand to the shoulder near the armhole.
2. Attach the ball part of the snap fastener to the tape. Attach the socket part of the snap fastener to the shoulder seam. ***(See Fig. 4-52.)***

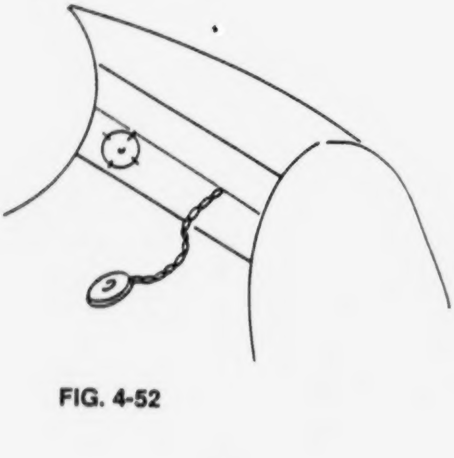


FIG. 4-52

F. Shoulder pad holders are used in washable blouses and dresses. They are of two types: (1) a fabric slip-cover attached to the shoulder seam, from which the pad is removed for laundering, and (2) a Velcro® tape or circle attached to the pads and the shoulder seams.

1. For a slipcover attached to the shoulder seam:
   a. For each shoulder pad cover, cut two rectangular pieces of the garment fabric on the straight grain. The pieces should be 1" longer and 1" wider than the shoulder pad to be covered.

b. Hem one long edge with a narrow hem.
c. Fold the fabric into a triangle by bringing the hemmed edge to the center *(See Fig. 4-53.)*
d. Stitch the long edge, turn inside out, and press.
e. Place the cover in the garment so that the point is at the neck edge and the stitched seam is toward the armhole. The opening is down toward the body. Attach to the shoulder seam.

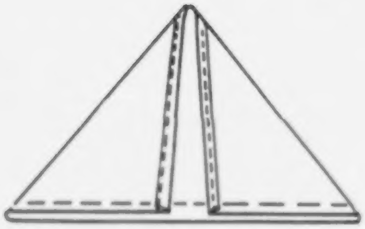


FIG. 4-53

2. For a slipcover attached with Velcro®:
   a. Made slipcover as above.
   b. Attach two Velcro® hook sections to the shoulder pad cover, one at the point and one in the center of the long edge.
   c. Attach the Velcro® loop sections to the garment on the shoulder seams to match the hooks on the pad.

VI. Mitering corners

(Objective 15, JS 33)

A. Terms and definitions

1. Miter--diagonal seam at the corner used to eliminate bulk and make corner neat
2. Binding--piece of fabric added to the garment/product to finish the outside edge
3. Bias binding--strip of fabric cut on the bias (45 degree angle) of the fabric to provide stretch and ease in application; used to finish an outside edge
4. Continuous bias binding--bias binding cut from a square of fabric in one long strip; used where a large amount of binding is needed, as on a quilt or a bedspread (For instructions for making continuous bias, see Unit VI--Trims and Finishes.)

B. Mitering involves folding fabric at the corner either at 90 or at 45 degree angles. The method used depends on whether you are working with garment areas, binding, or continuous strips of trim and whether the miter is made as you attach the trim or before you attach it.

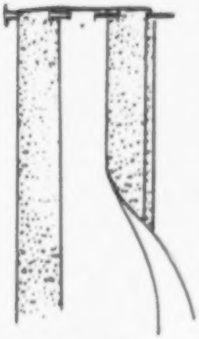


FIG. 4-54

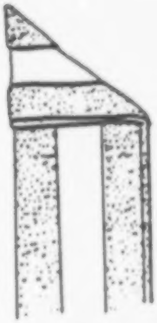


FIG. 4-55

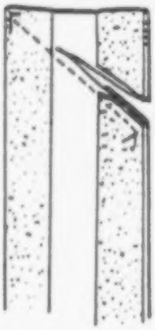


FIG. 4-56

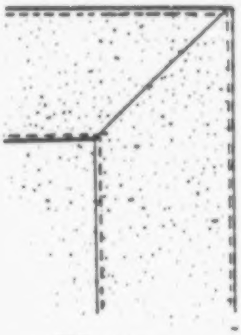


FIG. 4-57

1. To miter a band **before** it is applied:
    a. First, press under the seam allowance. Pin the band snugly to the garment or product for an accurate measurement of where the miter should come. Be careful not to stretch the bias. Mark the outside corner with a pin.
    b. Remove the band and fold it with right sides together. ***(See Fig. 4-54.)***
    c. Turn the fold diagonally to meet the turned-back edges and press. ***(See Fig. 4-55.)***
    d. Open up the fold and stitch in pressed crease, trimming to 1/8" and pressing open. ***(See Fig. 4-56.)***
    e. Sew the strip in place. ***(See Fig. 4-57.)***
2. To make the miter as the band is attached:
    a. Match raw edges of garment/product and bias binding. Mark the bias binding at the point where the seamlines cross at the corner of the garment/product. ***(See Fig. 4-58.)***

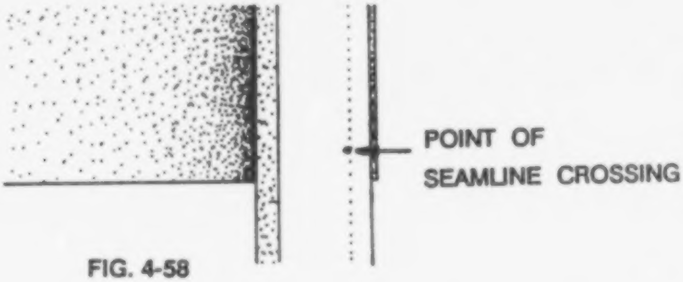


FIG. 4-58

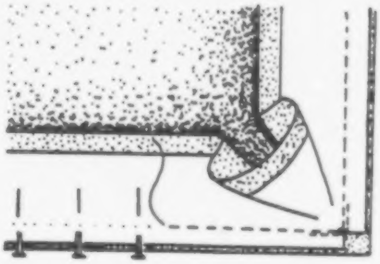


FIG. 4-59

    b. Sew a short row of stitches along seamline through the marked point. Clip seam allowance to point. Do not cut through stitches.
    c. Pin facing to garment, spreading facing at corner. Sew along seamline to corner clip. ***(See Fig. 4-59.)***
    d. Sew along seamline, pivoting at corner. ***(See Fig. 4-59.)***
    e. Fold down facing at corner so that fold is at a 45 degree angle to seamline ***(See Fig. 4-60.)*** Press.
    f. Pull facing away from garment/product and sew along pressed line.
    g. Trim away excess fabric at corner and press facing out.
3. To miter topstitched trim:
    a. Press under both seam allowances on trim, if necessary.
    b. Place trim on garment/product where desired. Pin and stitch along inner edge, stopping at corner with needle down in trim and fabric.
    c. Bring trim around corner, creating a fold in trim. Continue stitching around corner. ***(See Fig. 4-61.)***
    d. Tuck fold of trim under at corner and bring outside trim edges together at a 45 degree angle. ***(See Fig. 4-62.)*** Pin in place. Continue until entire strip has been sewn in place on one side. Trim away excess fabric in corners.

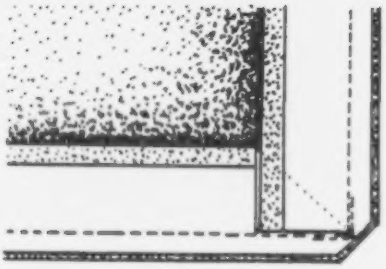


FIG. 4-60

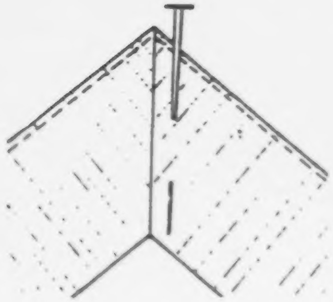


FIG. 4-61

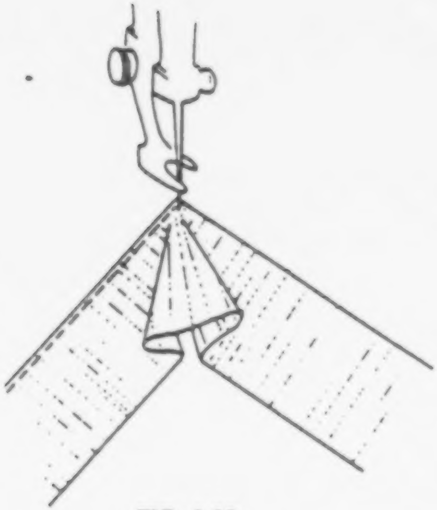


FIG. 4-62

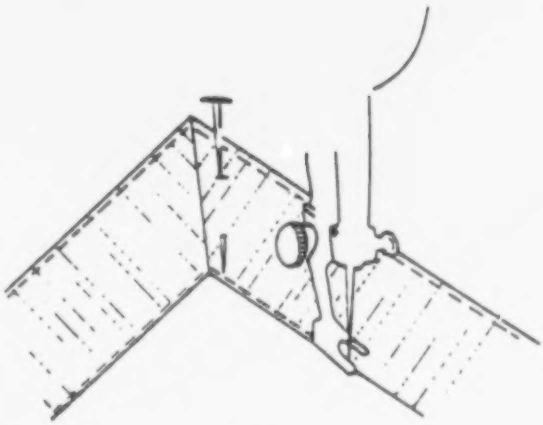


FIG. 4-63

e. Sew inside edge of trim, being careful to keep corners flat. Slipstitch corners. ***(See Fig. 4-63.)***

4. Square corners (as on pockets):
   a. At the corner, fold fabric up at a 45 degree angle. Press. ***(See Fig. 4-64.)***
   b. Fold side and bottom over, forming a 45 degree angle. Press. ***(See Fig. 4-65.)***

VII. Basting and fitting garment

(Objectives 16, 17; JS 34)

A. Before constructing a garment, compare measurements on the pattern with the measurements you have taken on the customer and make adjustments. Basting and fitting should not usually be necessary.

B. If you have questions about certain areas, such as the waist and hips, particularly for slacks, the areas can be machine basted and the garment tried on for fit.

1. Put garment on customer **right side out.**

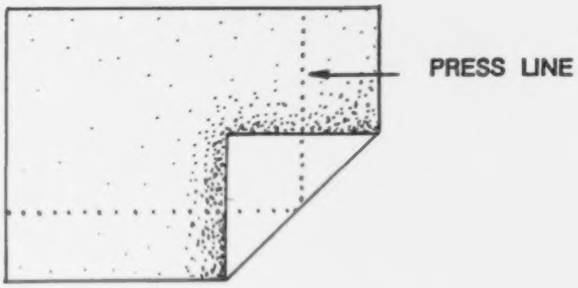


FIG. 4-64

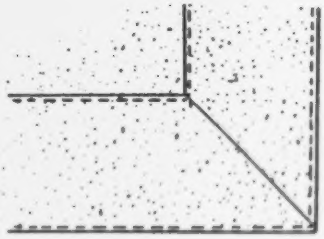


FIG. 4-65

2. Check areas such as waist, hips, crotch, and length.
3. Use pins or safety pins to mark areas needing adjustment. Put pins on the outside.
4. Take off garment.
5. From the inside, rub chalk over the pins to transfer the marked areas.

VIII. Removing spots and stains before pressing completed garment

(Objective 18; HO 1; AS 13)

A. Remove spots and stains. Before using any commercial spot remover, read the instructions. Test carefully on an inside area or a sample of the fabric.

B. Use the information on Handout 1 as a guide to the proper way to remove various stains.

IX. Pressing completed garment

(Objective 19; HO 2, 3; AS 14, 15)

A. Pressing vs. ironing

1. Press with light "lower, pause, and lift" motion (except for seam allowances).
2. Iron with a heavy, back and forth motion. **Never use this for pressing.**

B. When you are certain the garment fits properly and the hems and closures have been completed, it should be final pressed. If the garment has been carefully pressed as it was constructed and hung on a hanger, it will not require much final pressing.

C. Basic rules for custom detail pressing

1. **Press as you sew** during each step of construction. When garment is complete, it is too late to press in important details such as even, unbroken seamlines; smoothly shaped darts; flat, thin collar and facing edges; and softly rolled, set-in sleeves. Pressing as you go also helps make the next steps easier.
2. **Do not** overpress by keeping iron on one spot too long, or by using too much pressure. Overpressing causes a worn appearance. Not enough pressing creates a "homemade" look.

3. **Press seams in direction of fabric grain** and from wide to narrow. To determine direction of fabric grain, examine threads of raw edge. The direction these threads point is the direction of the grain. If seams are pressed against the grain, they will become stretched and will not hang properly in the finished garment. Straight seams, cut on the straight of fabric grain, may be pressed in either direction.
4. Use **tip portion** of iron when pressing seam allowances open. Open seam allowances with fingers and gently glide point along seamline in groove of stitching.
5. Protect fabric with **proper pressing cloth** when pressing on the right side. A pressing cloth will prevent shine or other damage to fabric caused by direct contact with iron. If fabric is heat sensitive, use pressing cloth on wrong side also.
6. Know how to correctly press each of the four basic fabric types.
   a. Animal fibers
      (1) Silk: Use moderate heat without moisture.
      (2) Wool: Use moderate heat with ample moisture. Do not press completely dry.
   b. Vegetable fibers (cotton, linen): use high heat with moisture.
   c. Synthetic fibers (acetate, acrylic, nylon, polyester, rayon, etc.): Use moderate to low heat and a pressing cloth to protect fabric.
   d. Fiber blends: Use method appropriate to fiber with highest percentage in fabric.
   e. Nap and pile fabrics: Steam. Do not press. Hold iron slightly above fabric and move in direction of nap. Iron must **not** be allowed to rest on fabric.
7. Make a "scrap test" to determine correct amount of heat, moisture, and pressure.
8. Use the proper pressing equipment to its fullest advantage. Proper pressing tools simplify pressing procedures and save time. They help prevent the frustration of having to do it over because the first results were unsatisfactory.

D. Tips for successful pressing

1. Press darts over a pressing ham to preserve the rounded effect that they are meant to create.
2. Flat seams should first be pressed closed to flatten the yarns and remove mini-puckers along the stitching. Then, press them open.
3. Press curved seams over a ham or a mitt to retain shape.
4. Use brown paper (grocery sacks or package wrapping paper) under seams to prevent lines from showing through on outside from the pressure of the iron.
5. Press hems only enough to give the garment a finished look.
6. Press collars and fronts last, as they will be noticed first.
7. Hang garment on a padded hanger to preserve shape.

E. Pressing equipment

1. Ironing board
   a. Tapered at one end for pressing both large and small pieces of fabric
   b. Rigid so the small end doesn't spring under heavy pressure
   c. Supported from the center so long skirts can be slipped over either end
   d. Adjustable height
   e. Padded 3/8" to 1" thick with either wool, cotton, felt, or foam rubber
   f. Covered with muslin or similar material and completely smooth to prevent ridges
2. Steam iron
3. Tailor's ham--a big, thick, firmly packed cushion about 8" x 10" and about 5" thick; has rounded surfaces for pressing shaped areas such as bust darts and curved seams.

4. Tailor's cushion--shaped to fit into the sleeve cap and upper part of the sleeve; good for pressing other small areas
5. Pressing mitt--padded, glove-like cushion used for small areas difficult to reach without mussing the garment. The pocket can be slipped over end of sleeve board.
6. Sleeve board--two small, flat ironing surfaces for pressing seams and details of narrow garment sections (sleeves, pants legs); also helpful for hard-to-reach areas such as necklines and sleeve caps
7. Dressmaker's clapper--rounded, wooden block used to obtain sharp creases in heavy fabric. The bulky edge of the garment is first pressed with steam iron, then pounded with the clapper. Pounding helps speed the removal of steam from the fabric. The clapper helps fabric hold its crease when dried.
8. Point presser or pounding block--wooden tool. The straight-point surface is used when pressing corners, points, and straight seams. The block base works like the dressmaker's clapper.
9. Seam roll--firmly packed cylindrical cushion used primarily for pressing seams in very narrow areas such as sleeves
10. Velvet or needle board--pressing surface for pile fabrics; made of steel wires mounted on heavy canvas. Fabric is placed face down on the board with wires fitting between pile, keeping it from matting during pressing.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

HANDOUT 1--STAIN REMOVAL GUIDE

(NOTE: Where dry cleaning solvent is recommended, use only a safe, nonflammable solution.)

Adhesive tape	See chewing gum.
Blood	While stain is fresh, soak in cold water. If stain remains, soak again in an enzyme presoak. Work in detergent paste. Launder in warm water. If the stain persists, soak again with bleach. Launder.
Candle wax and paraffin	Remove surface wax with dull side of table knife. Place the stain between clean white blotters or paper towels and press with warm iron. Rotate toweling as it picks up the stain. Sponge back with a dry-cleaning fluid. Dry. If stain remains, soak again in an enzyme presoak or oxygen bleach. Rinse and launder.
Carbon paper	Sponge with dry cleaning solvent or apply a prewash soil-and-stain remover. Launder. If stain remains, put a few drops of ammonia on it. Repeat with detergent. Rinse and launder.
Catsup and tomato-based stains	Sponge with dry cleaning solvent or apply a prewash soil-and-stain remover. Launder. If stain remains, apply a light-duty liquid detergent. Launder. If stain remains, soak in an enzyme presoak. Rinse and launder.
Chewing gum	Harden gum by rubbing it with ice. Scrape off excess with dull knife. If a stain remains, sponge with a dry cleaning fluid. Rinse and launder.
Chocolate and cocoa	Soak in cold water. If colored stain remains, pretreat with detergent paste or dry cleaning solvent. Launder. If stain remains, soak in an enzyme presoak. Launder in water as hot as is safe for the fabric.
Coffee and tea (black)	Sponge immediately in cool water. Soak in warm water with enzyme presoak. If stain remains, use chlorine bleach if safe for the fabric. Launder.
Coffee and tea (with cream)	Soak in solution of 1 quart warm water, 1/2 teaspoon light-duty liquid detergent, and 1 tablespoon vinegar for 15 minutes. Rinse. Launder. If stain remains, soak again in an enzyme presoak. Launder. Use chlorine bleach to remove final stain if safe for fabric. Launder.
Cosmetics	Pretreat with detergent paste or sponge with dry cleaning solvent. Launder. Repeat treatment if necessary. If stain remains, put a few drops of ammonia in light-duty liquid detergent solution and apply to stain. Rinse and launder.
Crayon	Loosen with cooking oil. Add detergent, working until outline of stain is removed. Launder.

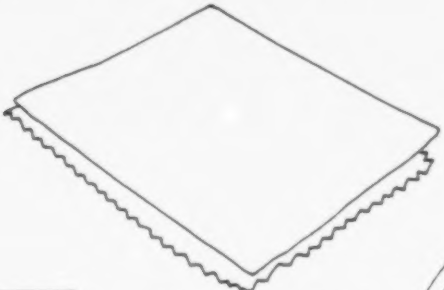
Egg	Scrape off excess. Soak in cool water with enzyme presoak. Rinse. If stain remains, sponge with dry cleaning solvent. Launder.
Fruits and berries	CAUTION: Do not use soap on a fruit stain. For fresh stains, soak at once in cool water and then soak in warm water with an enzyme presoak. Rinse and launder. For older stains, sponge with white vinegar. Rinse. Use treatment for fresh stains. If stain remains, use chlorine bleach, if safe for fabric.
Grass and foliage	Soak at least 30 minutes in cool water with enzyme presoak. Launder with detergent and hottest water safe for fabric. Rinse. If stain remains, bleach with 3 percent hydrogen peroxide. Rinse and launder.
Grease and oil	Use talcum powder to absorb as much grease as possible. Brush thoroughly. Sponge with dry cleaning solvent or soil-and-stain remover. Launder in hottest water safe for fabric with plenty of detergent. If stain remains, repeat treatment.
Ice cream	Soak in cool water. Then treat with detergent paste. If chocolate or fruit remains, follow directions for those stains.
Ink (ball-point and felt tip)	Sponge with amyl acetate. Sponge with dry cleaning solvent. Dry. Repeat if necessary. Rinse. Pretreat with detergent paste and launder. Depending on the fabric, add bleach. If fabric permits, try rubbing alcohol or hair spray on the stain.
Ink (India)	Run cool water through to loosen pigment. Dry-sponge with dry cleaning solvent. Wash with detergent. If stain remains, soak in solution of 1 to 4 tablespoons of ammonia to 1 quart water. Rinse. Repeat if needed.
Mildew	Launder in hottest water safe for fabric. If possible, dry in the sun.
Mustard	Pretreat with cool water and detergent. Launder.
Nail polish	Sponge with nail polish remover. Launder. If stain remains, add a few drops of ammonia to denatured alcohol and sponge. Launder.
Paint (oil base)	Treat stain while still wet or wrap in plastic or air-tight wrap to prevent drying. Sponge with dry cleaning solvent. Rinse. If a particular solvent is recommended as thinner for the paint, treat with that solvent. While the stain is wet with the solvent, work liquid detergent into it. If the stain remains, soak in hot water overnight. Launder. Repeat if necessary.
Paint (water base)	Treat while still wet. Sponge with dry cleaning solvent. Soak in cool water. Launder.

Perspiration	Soak with enzyme presoak. Wash with hottest water safe for fabric. If stain remains, dampen and sprinkle with meat tenderizer. Let stand 30 to 60 minutes. Treat with dry cleaning solvent. Rub detergent on stain. Launder. If stain persists, apply ammonia to fresh stain or white vinegar to old stain. Rinse with water and launder.
Rubber cement	See chewing gum.
Rust	Pretreat with salt paste made with lemon juice. Rinse with water and let dry in the sun. Launder.
Scorch	Pretreat with hot water and detergent. If stain remains, rub with suds. Add bleach if fabric permits. Launder in hot water.
Shoe polish	Scrape off as much as possible. Pretreat with detergent paste and launder.
Soft drinks	Sponge immediately with cool water. Launder.
Tomato	Sponge area with cold water. If stain remains, pretreat.

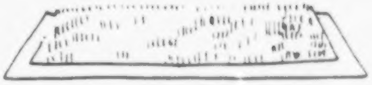
CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

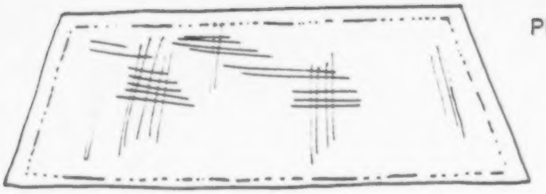
HANDOUT 2--PRESSING EQUIPMENT



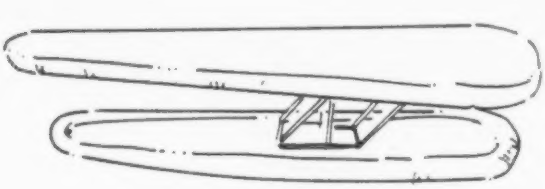
PRESSING CLOTHS



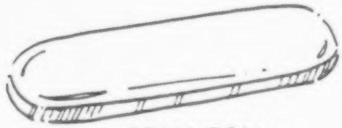
NEEDLE BOARD



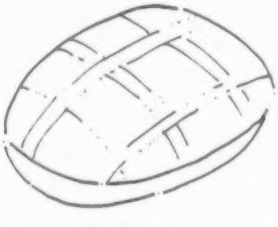
PRESSING PAD



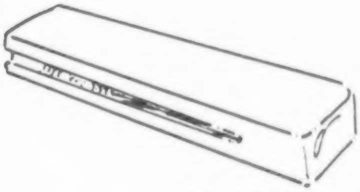
SLEEVE BOARD



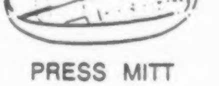
SEAM ROLL



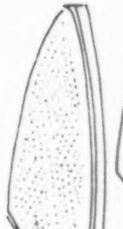
TAILOR'S HAM



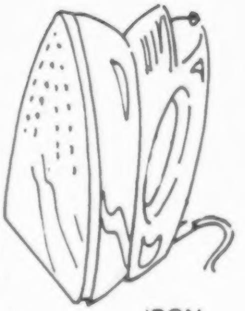
POUNDING BLOCK or CLAPPER



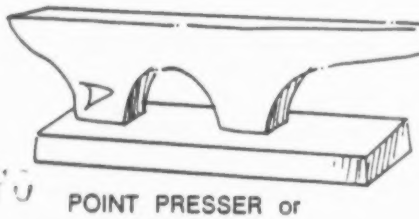
PRESS MITT



IRON COVER



IRON



POINT PRESSER or PRESSING BOARD

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

HANDOUT 3--PRESSING GUIDE

Pressing is essential and can be a highly skilled operation. Without careful pressing, even the best sewing will fail to produce good-looking garments.

Pressing means bringing pressure down on seams, hems, and faced parts that require flattening. The amount of pressure determines good or poor results in keeping original texture. The skillful operator supports the weight of the iron, molds the garment as the material is manipulated on the board, and arranges the garment on the pressing surface.

The equipment and procedure to be used is determined by (1) the shaping of the garment to fit the contours of the body and (2) the character of the fabric.

PRESSING EQUIPMENT

The bare essentials are an ironing board, a dry iron, and a press cloth. Other helpful pieces are a pressing mitt, sleeve board, steam iron, and a pressing cushion. All can be purchased, and some can be made.

Pressing cushions come in several sizes and shapes. They can be made at home. They are usually covered with wool on one side and twill cloth, heavy unbleached muslin, or canvas on the other. They are filled with wool or sawdust and packed until very hard.

A padded roll can be used as a substitute for a sleeve or seam board. To make, roll a magazine or two to form a tight, firm roll 11"-12" long and 2" in diameter. Tie with sewing thread. Cover with 2 to 3 thicknesses of flannelette. The outside cover may be muslin or twill cloth. Secure the ends of the roll by handstitching.

CARE OF THE IRON

The base of the iron must be kept clean and smooth. If finishes and sizing from fabrics come off on the iron, rub the warm iron on waxed paper sprinkled with salt. A cloth dampened in ammonia or a mild abrasive can also be used for cleaning the iron.

PRESS CLOTHS

Steam irons can sometimes be used without a press cloth on the wrong side of fabrics, but on the right side of dull finished fabrics, a press cloth is needed to prevent shining. With a dry iron, use a press cloth on both the right and wrong sides of the fabric.

For general use the cloth should be about 18" by 24". For smaller areas, a smaller one may be needed.

Wool fabric needs a heavyweight cloth (unbleached muslin, twill cloth, or duck) to protect the material when a dry iron is used. Use wool flannel on the right side to preserve the soft, dull finish. Make a double press cloth for wool by sewing together a cloth of cotton twill or muslin and one of wool.

For rayon crepes and acetate, use cotton twill or canvas for heavy pressing and wool flannel or self fabric for pressing the right side.

Silks and smooth-finished fabrics press well with several layers of cheesecloth or batiste.

Tissue paper, alone or under cheesecloth, may help prevent water spotting when moisture is used.

PROCEDURES TO USE WHEN PRESSING

1. Always test the fabric to determine the effect of temperature, moisture, and pressure.
2. Press with the grain of the fabric to keep lengthwise and crosswise threads at right angles.
3. Press by lifting and lowering the iron to avoid stretching the fabric.
4. Press on wrong side when possible.
5. Press each piece before joining to another.
6. Press shaped parts of the garment over a curved surface (tailor's cushion or edge of ironing board).
7. Use double thicknesses of press cloth when doing detail pressing from right side (e.g., collars, pockets). Leave wool slightly damp; force out steam and flatten the edges with a clapper or beater.
8. To remove shined edges and basting thread imprints, try one of these methods.
    a. Place the garment right side up and hold a steam iron above the shined or marked area. While fabric is damp, brush with a piece of the same fabric or a stiff brush.
    b. Place a napped wool cloth and then a damp cloth over the garment. Steam by holding a dry iron close to the press cloth (but not on it). After the nap is raised, place a dry cloth over the material and hold the iron close to (not on) the press cloth so that the heat dries the fabric.
9. Arrange each part of the garment on a pressing surface in either the flat or curved position it should have when worn. Do not flatten rolled collars or lapels.
10. To avoid imprints of seam and edges, place the garment against a hard surface when pressing from the wrong side and against a thick and soft padded surface when pressing from the right side.
11. Allow garment to dry several hours or overnight after steam pressing.

SEAMS

1. Always press a seam before crossing it with another seam.
2. Press seam as stitched, press open, and then press in the direction it will have in the garment.

3. To avoid seam imprints:
    a. Use a padded roll for pressing seam open.
    b. Slip strips of brown paper between the garment and the seam allowance.
    c. Slip the point of the iron under the seam edges and press to remove any imprints.
4. Press curved seams over a curved surface to prevent shrinking the puffed area on either side of the seam.

DARTS

1. Press along the line of stitching, then turn to one side and press against the garment. Waistline and shoulder darts are turned toward the center front and center back, underarm darts toward the waistline, and elbow darts toward the wrist.

2. Darts that taper at both ends (e.g., at waistline of jacket or A-line dress), should be clipped at the center to 1/4" of the stitching, then pressed toward the center.

3. Press darts over a tailor's cushion to preserve the rounded contour.

4. Darts in heavy fabric should be slashed to within 1" of the point and pressed open with the closed end pressed as a box pleat.

SKIRT HEMS

1. Press the hem from the lower edge up. Never press the hem from side to side along the skirt, as this tends to stretch the hem since it is often at least slightly bias.

2. When pressing from the right side, use a well padded surface (folded Turkish towel) and a heavy press cloth to keep imprint from showing through.

SLEEVES

1. Press lengthwise seam as stitched, then open from armhole to lower edge. Use a sleeve board or a magazine roll.

2. Press lower edge of sleeve by slipping the point of the iron to the inside. Turning the sleeve wrong side out tends to stretch the inner surface.

3. The armhole seam is pressed from the raw edge to the seam, but not beyond as this would press wrinkles on the under layer. Hold under half of the armhole seam in a definite inward curve as you press to avoid stretching.

4. The upper half of the seam is turned toward the sleeve, and the under half is left in an upward position.

5. Place a pressing mitt or folded towel in sleeve cap and press lightly to give a firm, rounded look.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

ASSIGNMENT SHEET 9--SLEEVES, GUSSETS, PLACKETS, AND CUFFS

Matching: Match each term with its definition by writing the letter in the space provided.

a. Continuous lap
b. Cuff
c. Dropped shoulder
d. Gusset
e. Kimono sleeve
f. Placket
g. Pressing mitt
h. Raglan sleeve
i. Set-in sleeve
j. Shrink
k. Sleeve board
l. Sleeve cap

___ 1. To use steam and heat to decrease the size of the area by causing threads of fabric to draw together

___ 2. Curved upper part of the sleeve, between notches on a pattern, which allows for fit at top of upper arm

___ 3. Shoulder seam which is lowered to hang down over the top of the arm

___ 4. Opening which makes room in a part of a garment so that it can be put on

___ 5. Single piece of fabric used for a placket facing

___ 6. Sleeve cut out with the bodice as one piece

___ 7. Small pressing board that provides a flat surface on which to press sleeve seams open

___ 8. Small piece of equipment which fits over the hand and can be placed inside the sleeve for steaming

___ 9. Lower part of sleeve which contains the fullness and fits more closely to the part of the arm where it falls

___ 10. Sleeve, with dart or seam on top, which includes part of the shoulder of the garment

___ 11. An inset of triangular shaped fabric used to give more room or to make a bias areas stronger

True or False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 12. The grainline from top to bottom should be at right angles to the floor.

___ 13. The cuff, plackets, and/or hems should be completed after the sleeve is set in.

___ 14. It is not possible to check the finished length of the sleeve until after it is sewn in.

___ 15. A few small pleats in the sleeve seam do not matter.

___ 16. Most of the ease in the sleeve cap should go toward the top.

___ 17. Baste the sleeve in the armhole on the seamline.

___ 18. When stitching in the sleeve, begin at the notch, then stitch around the cap and back to the notch. Stitch again from notch to notch under the arm.

Short Answer: Write brief responses to these questions.

19. When is a gusset used?

20. How should the curve on the underarm seam of a kimono sleeve be treated?

21. How does a raglan differ from a set-in sleeve?

22. What is one advantage of a raglan sleeve?

Multiple Choice: Circle the correct word(s) in parentheses to correctly complete each statement.

23. A lap placket should be constructed (before / after) the sleeve is inserted into the garment.

24. To reinforce the placket area, sew on the stitching line with (20 / 12-15 / 6-8) stitches per inch until you near the point. Then sew with (20 / 12-15 / 6-8) stitches per inch.

25. If you slash through the stitches at the point, it (is / is not) necessary to sew more reinforcement stitches before continuing.

26. The seam that attaches the placket to the sleeve (will / will not) be equal in width throughout.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

ASSIGNMENT SHEET 10--HEMS

Matching: Match each term with its definition by writing the letter in the space provided.

a. Blindstitch
b. Catchstitch
c. Cuffs
d. Hem
e. Machine hem
f. Slipstitch
g. Tailor's hem
h. Vertical hemming stitch

___ 1. Wide hem made by turning the fabric back against the garment

___ 2. Tiny, invisible handstitches taken through a fold of fabric; used for hemming skirts and other fine work

___ 3. A hand or machine stitch used for hemming and holding facings in place

___ 4. Special hem used in bulky and heavy fabrics that do not ravel

___ 5. Edge finish formed by folding under the raw edge and stitching it by hand or machine

___ 6. Cross stitch used to hold raw edges in place securely

___ 7. Durable and stable stitch best suited to hems where hem edges are finished with hem tape or stretch lace

___ 8. Hem usually found on sportswear and home decorator items.

True or False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 9. The hem for a skirt can be measured down from the waist.

___ 10. The stitches holding in the hem should not show.

___ 11. Fullness should be removed from the turned up area of the hem.

___ 12. It doesn't matter which shoes the customer wears while wearing the garment and being measured for the hem.

___ 13. Both trouser legs should be measured for the hem separately.

___ 14. The garment should hang for 24 hours before the hem is measured.

___ 15. All skirts and dresses for a customer should be hemmed to the same length.

___ 16. Only the hem depth stated on the pattern will work with a garment.

___ 17. The maximum amount of hem depth is determined by the longest part of the garment.

___ 18. The hem is pressed or steamed after it is sewn in.

___ 19. A very sheer fabric may look better with a wide doubled hem.

___ 20. A Hong Kong seam makes use of a strip of bias stitched to the garment.

___ 21. A weight in the hem of a garment will pull the garment out of shape and should not be used.

___ 22. If the hem edge is pulled up to fit, it must not be smaller than the garment.

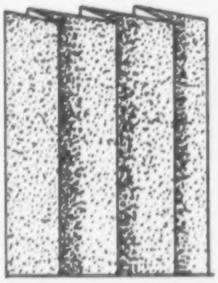
CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

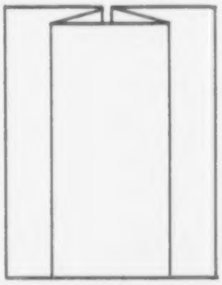
ASSIGNMENT SHEET 11--PLEATS, TUCKS, AND RUFFLES

Matching: Match each term with the picture or descriptive phrase by writing the letter in the space provided. A term may be used more than once.

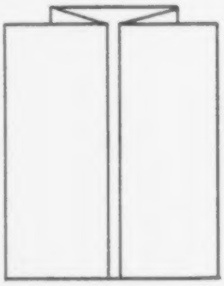
a. Accordion pleats
b. Blind tuck
c. Box pleats
d. Circular ruffle
e. Dart or released tuck
f. Inverted pleats
g. Knife or side pleats
h. Pin tucks
i. Ruffle



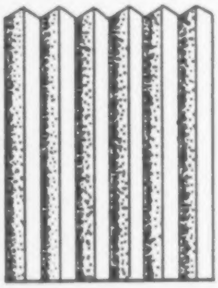
___ 1.



___ 2.



___ 3.



___ 4.

___ 5. Very narrow pleats which are always pressed the entire length of the garment

___ 6. Narrow fold stitched very close to the foldline

___ 7. When the fold of each tuck touches or overlaps the next, covering the stitching line

___ 8. Two side pleats which turn away from each other

___ 9. Two side pleats which are turned toward each other and meet

___ 10. Band of fabric, either hemmed or doubled, that is gathered or pleated and applied to an edge

Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 11. Why are tucks usually used?

- a. Decoration
- b. Hiding bulges
- c. Releasing fullness
- d. Concealing pockets

___ 12. How are pleats referred to?

- a. Area of the garment where they occur
- b. Direction in which they are pressed
- c. Way in which they are folded or stitched
- d. How far apart they occur
- e. All of the above

___ 13. How are ruffles attached?

- a. To the inside seam
- b. To the outside, with a heading
- c. On cuffs and collars
- d. All of the above

Multiple Choice: Circle the correct word(s) in parentheses to correctly complete each statement.

14. A tuck should be stitched with thread that (matches / contrasts with) the fabric.

15. Tucks should be pressed (one at a time, as they are sewn / all at once after they are sewn).

16. The distance between tucks should (vary / be the same).

17. Tucks are usually pressed (away from / toward) the center line.

18. The part which folds against the pleat and lies behind it is called the (underlay / reverse pleat / inner pleat).

19. Unpressed pleats should be basted from the top to the bottom of the (garment / stitching area).

20. If a ruffle is made of several sections, the seams must be (finished / pressed open).

21. The quarter points of the garment (are / are not) always the center front and back and the side seams.

22. A ruffle with a heading is gathered on the (center foldline / one inch down from the top / on the line that will be attached to the seam allowance of the garment).

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

ASSIGNMENT SHEET 12--COUTURE TOUCHES

Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 1. Where are couture touches found?

- a. In most ready-to-wear clothing
- b. Only in expensive ready-to-wear clothing
- c. Only in custom-made garments
- d. In some expensive ready-to-wear and some custom-made clothing
- e. In all expensive ready-to-wear and all custom-made clothing

___ 2. How is the front of a waistband finished?

- a. Covered with grosgrain ribbon
- b. Self-band casing
- c. Separate band casing
- d. Faced with a grosgrain ribbon
- e. Covered with a contrasting fabric
- f. Any of the above

___ 3. Why would a waistline ribbon stay be used?

- a. Adds a decorative touch
- b. To tie around the garment
- c. To take the stress off the zipper
- d. To tie on the garment
- e. As a place to attach a label

___ 4. How are fabric belt loop carriers constructed?

- a. From contrasting fabric
- b. From small bias scraps of the garment fabric
- c. From the selvage of the garment fabric
- d. One at a time

True or False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 5. Fabric carriers are attached to the garment after the waistband is sewn in place.

___ 6. A lingerie strap guard is used to keep straps in place so they do not show.

___ 7. Shoulder pad holders may be sewn in place in the garment.

___ 8. Velcro® is never used in a quality garment.

___ 9. A casing is a tunnel of fabric used to enclose elastic or a drawstring.

___ 10. A crocheted loop belt carrier is attached to the garment before the waistband is attached.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

ASSIGNMENT SHEET 13--REMOVE SPOTS AND STAINS

Directions: Use **Handout 1** to help you determine how to remove the following stains. Write your answers below.

1. Catsup from a cotton skirt

2. Ball-point pen ink from a sweat suit

3. Blood from a white dress shirt

4. Lipstick from a white handkerchief

5. Lipstick from a polyester blouse

6. Cocoa from a child's polyester and cotton romper

7. Candle dripping from a polyester tablecloth

8. Chewing gum from a wool suit

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

ASSIGNMENT SHEET 14--PRESSING TECHNIQUES

True or False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 1. If you plan to press thoroughly when you are finished, you do not have to press as you sew.

___ 2. A heavy back-and-forth motion is best for pressing seams.

___ 3. A pressing cloth will usually prevent shine.

___ 4. A pressing cloth and low heat should be used on cotton blends.

___ 5. When pressing silk, use moderate heat and moisture.

___ 6. When pressing wool, use moderate heat and moisture.

___ 7. Synthetic fibers must be pressed with moderate to low heat.

___ 8. Cotton and linen require a hot iron and moisture.

___ 9. Velvet may be pressed on the wrong side.

Short Answer: Write a brief response to this question.

10. What is the difference between pressing and ironing?

Fill in the blank: Complete the statements by filling in the blanks.

11. A finished garment should be hung on a ______________________ to help it keep its shape.

12. Flat seams should first be pressed __________________ to remove mini puckers. Then press them __________________.

13. Darts should be pressed over a ____________________ ____________________.

14. To prevent lines from showing through on the outside, use ______________________ under seams.

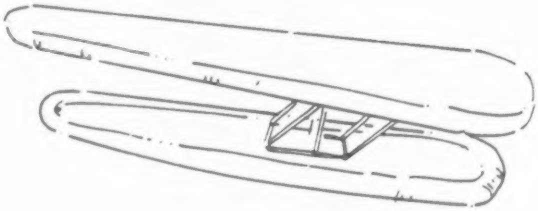
15. __________________ and ____________________ will be seen first, so press them last.

CONSTRUCTION TECHNIQUES

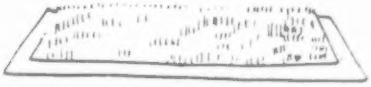
UNIT IV, PART 2

ASSIGNMENT SHEET 15--PRESSING EQUIPMENT

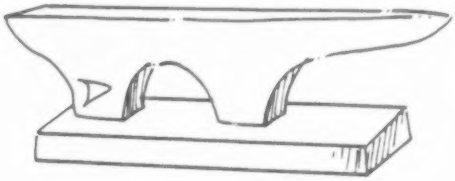
Directions: Identify the equipment shown.



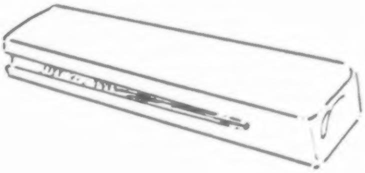
1. ____________________



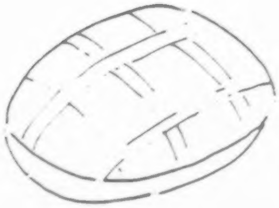
2. ____________________

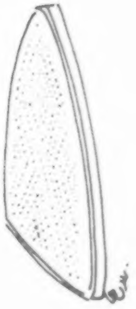


3. ____________________



4. ____________________





5. ____________________

6. ____________________

Matching: Match the equipment listed to the appropriate function. (Some answers will be left over.)

a. Clapper
b. Iron cover
c. Point presser or pounding block
d. Pressing ham
e. Pressing mitt
f. Sleeve board
g. Velvet or needle board

___ 7. Pressing surface for pile fabrics

___ 8. Wooden block used to pound heavy fabric to remove steam after pressing

___ 9. Small, flat ironing surface for pressing seams and detail areas

___ 10. Wooden tool used when pressing corners, points, and straight seams

___ 11. Padded cushion with a pocket, used for pressing small areas that are difficult to reach

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET 9

1. j
2. l
3. c
4. f
5. a
6. e
7. k
8. g
9. b
10. h
11. d
12. T
13. F
14. F
15. F
16. F
17. F
18. T

19. A gusset is used with a kimono-style sleeve to keep it from tearing or to increase the size of a garment which is tight at the underarm, sleeve, and bodice area.

20. A kimono sleeve curve should be clipped and pressed open.

21. The raglan sleeve includes the shoulder part of the bodice and has a shoulder dart or a top seam.

22. It is very roomy and allows bulky clothes to be worn underneath.

23. before
24. 12 to 15 / 20
25. is
26. will not be

CONSTRUCTION TECHNIQUES--UNIT IV, PART 2
Answers to Assignment Sheets

ASSIGNMENT SHEET 10

1. c
2. f
3. a
4. g
5. d
6. b
7. h
8. e
9. F
10. T
11. T
12. F
13. T
14. T
15. F
16. F
17. F
18. T
19. T
20. T
21. F
22. T

ASSIGNMENT SHEET 11

1. g
2. c
3. f
4. a
5. a
6. h
7. b
8. c
9. f
10. i
11. a
12. c
13. d
14. matches
15. one at a time, as they are sewn
16. be the same
17. away from
18. underlay
19. stitching area
20. finished
21. are not
22. on the line that will be attached to the seam allowance of the garment

ASSIGNMENT SHEET 12

1. d
2. f
3. c
4. c
5. F
6. T
7. T
8. F
9. T
10. F

ASSIGNMENT SHEET 13

See Handout 1.

ASSIGNMENT SHEET 14

1. F
2. F
3. T
4. F
5. F
6. T
7. T
8. T
9. F
10. Pressing is done with a light "lower, pause, and lift" motion (except for seam allowances). Ironing is done with a heavy, back and forth motion.
11. padded hanger
12. closed; open
13. tailor's ham
14. brown paper
15. collars and fronts

ASSIGNMENT SHEET 15

1. sleeve board
2. needle board
3. point presser or pressing board
4. clapper or pounding block
5. tailor's ham
6. iron cover
7. g
8. a
9. f
10. c
11. e

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 20--CONSTRUCT A SLEEVE PLACKET

Materials and equipment:

Completion of Assignment Sheet 9
Sleeve cut out of fashion fabric
Strip for placket
Basic sewing supplies

Steps of procedure:

1. Reinforce placket.
2. Slash placket opening.
3. Cut strip of fabric for placket.
4. Pin strip to opening.
5. Stitch.
6. Press. Turn under raw edge. Press.
7. Fold placket over raw edge and pin in place.
8. Stitch.
9. Press. Stitch across V.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 21--CONSTRUCT A SLEEVE CUFF

Materials and equipment:

Completion of Assignment Sheet 9
Cuff pieces with interfacing attached
Sleeve with placket completed, gathers or pleats in place, underarm sleeve seam sewn
Sewing supplies

Steps of procedure:

1. Stitch cuff to cuff facing.
2. Understitch the bottom edge of cuff. Turn. Press.
3. Press under seam allowance on facing.
4. Pin cuff and sleeve together. Stitch.
5. Press seam. Trim.
6. Topstitch, stitch-in-the-ditch, or slipstitch cuff.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 22--CONSTRUCT A SET-IN SLEEVE

Materials and equipment:

Completion of Assignment Sheet 9
Sleeve cut out, markings transferred, any darts made
Garment ready for sleeve insertion
Basic sewing supplies

Steps of procedure:

1. Unless there is question about the finished length, finish the plackets, cuff, hems, etc. (See Job Sheet 20--Construct a Sleeve Placket and Job Sheet 21--Construct a Sleeve Cuff.)
2. Machine baste sleeve cap between notches.
3. Pin sleeve inside bodice matching underarm seams and construction points.
4. Draw up ease and distribute. Pin.
5. Check for pleats. Adjust if necessary.
6. Machine baste.
7. Steam the seam allowance.
8. Remove pins and try on sleeve.
9. Stitch.
10. Check for pleats. If necessary, clip and restitch.
11. Remove basting.
12. Grade seams or finish seam allowances.
13. Steam seam.
14. Attach shoulder pads, if desired.
15. Finish the plackets, cuffs, hems, etc., if not already done.

UNIT IV, PART 2

JOB SHEET 23--CONSTRUCT A RAGLAN SLEEVE

Materials and equipment:

Completion of Assignment Sheet 9
Bodice requiring a raglan sleeve, cut out
Sleeve, cut out
Basic sewing supplies

Steps of procedure:

For sleeve with ease

1. Pin baste sleeve in place.
2. Sew sleeve seam.
3. Pin baste sleeve into garment, pulling up ease as necessary.
4. Machine baste. Check for pleats.
5. Stitch in place. Press.

For sleeve set flat

1. Pin baste diagonal shoulder seams to sleeve.
2. Stitch, check, and press.
3. Pin baste side and sleeve seams.
4. Stitch in place.
5. Press.
6. Finish seams.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 24--HEM GARMENT/PRODUCT

Materials and equipment:

Completion of Assignment Sheet 10
Garment that is ready to hem
Basic sewing supplies

Steps of procedure:

1. Have customer try on garment.
2. Decide on desired hem distance from the floor.
3. Measure hemline from the floor up.
4. Pin up hem on the foldline and check for irregularities. Pin or baste hem.
5. Try garment on customer.
6. Measure and mark hem depth.
7. Cut off excess fabric, if required.
8. Apply machine stitches to gather fullness, if required.
9. Apply seam tape, stretch lace, or other edge finish, as desired.
10. Adjust hem to fit and pin in place.
11. Sew hem in place.
12. Remove basting, press.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 25--CONSTRUCT PANTS CUFFS

Materials and equipment:

Trousers to be cuffed
Basic sewing supplies

Steps of procedure:

1. Measure and mark hemline.
2. Measure and mark depth of cuff.
3. Determine depth of fabric needed to cover cuff plus hem.
4. Cut bottom of cuff to correct length.
5. Turn pants inside out and fold up ends.
6. Sew.
7. Fold cuff up. Tack in place. Press.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 26--CONSTRUCT A PLEAT

Materials and equipment:

Completion of Assignment Sheet 11
Skirt or fabric to be pleated
Basic sewing supplies

Steps of procedure:

1. Transfer pattern markings to fabric.
2. Crease fabric on foldline and pin.
3. Baste length of pleat.
4. Measure the distance to the next pleat.
5. Repeat steps 2, 3, and 4 for all pleats.
6. Check distance between pleats and length of pleats.
7. Sew pleats in place. Press.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 27--CONSTRUCT A TUCK

Materials and equipment:

Completion of Assignment Sheet 11
Garment or fabric requiring tucks
Basic sewing supplies

Steps of procedure:

1. Transfer pattern markings to fabric.
2. Crease fabric on foldline.
3. Pin or hand baste.
4. Stitch. Press.
5. Repeat steps 2, 3, and 4 for the next tuck.
6. Check distance between tucks as each is stitched. Correct errors immediately.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 28--CONSTRUCT A RUFFLE

Materials and equipment:

Completion of Assignment Sheet 11
Fabric for ruffle
Garment for ruffle
Basic sewing supplies

Steps of procedure:

1. Cut ruffle to desired length and width.
2. Sew into a circle. Seam, if required, and finish seams.
3. a. If ruffle is to be attached by stitching into a seam, hem or finish one edge of ruffle.

   b. If ruffle will have a heading or is attached at its center, hem or finish both long edges of ruffle.
4. Find and mark quarter points on ruffle and garment.
5. Run gathering thread along stitching line of ruffle.
6. Pin baste ruffle to garment, matching quarter points.
7. Stitch ruffle to garment.
8. For ruffle attached in seam, finish seam allowance edges, and turn toward garment.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 29--CONSTRUCT A WAISTBAND

Materials and equipment:

Garment needing waistband
Waistband strip
Stiffening for waistband
Basic sewing supplies
Hook and eye or button

Steps of procedure:

1. Cut out the waistband. Use the selvage, if desired.

2. Cut interfacing or stiffening.

3. Attach interfacing or stiffening.

4. Stitch ends of waistband.

5. Turn and press.

6. Pin to garment.

7. Baste and fit, if necessary.

8. Stitch in place.

9. Grade seam allowance.

10. Turn waistband to inside. Stitch in place.

11. Apply button and buttonhole or hook and eye.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 30--CONSTRUCT BELT LOOPS AND CARRIERS

Materials and equipment:

Completion of Assignment Sheet 13
Garment ready for belt loops
Fabric for belt loops
Basic sewing supplies

Steps of procedure:

1. Measure fabric along selvage.

2. Cut fabric and fold in thirds.

3. Press. Topstitch along both sides.

4. Cut strip into desired lengths.

5. Fold each length under at both ends and press.

6. Attach by hand or topstitch by machine.

JOB SHEET 31--CONSTRUCT A SELF-BAND CASING

Materials and equipment:

Completion of Assignment Sheet 12
Garment requiring casing (may be waistband, sleeves, or other area)
Elastic
Basic sewing supplies

Steps of procedure:

1. Cut elastic 1" to 2" shorter than the waist, sleeve, or other measurement.

2. Divide elastic into quarters.

3. Pin elastic in place on garment.

4. Stitch, stretching elastic.

5. Turn fabric and elastic to inside. Turn under raw edge. Stitch through elastic and extension, stretching elastic.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 32--CONSTRUCT A LINGERIE STRAP GUARD

Materials and equipment:

Completion of Assignment Sheet 12
Snap fastener
Ribbon, hem tape, or thread chain
Basic sewing supplies

Steps of procedure:

1. Cut tape, ribbon, or chain.

2. Sew in place by hand.

3. Attach ball of snap fastener to the tape.

4. Attach socket part of snap to shoulder seam.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 33--MITER SQUARE CORNER

Materials and equipment:

Patch pocket
Basic sewing supplies

Steps of procedure:

1. Press seam allowances under on sides and bottom of pocket.

2. Open out seam allowances.

3. Fold corners in at a true 45-degree angle. Press.

4. Trim.

5. Fold seam allowances back so that they meet at the corner. Press.

CONSTRUCTION TECHNIQUES

UNIT IV, PART 2

JOB SHEET 34--BASTE AND FIT GARMENT

Materials and equipment:

Garment to be fitted
Basic sewing supplies

Steps of procedure:

1. Baste garment with longest machine stitch.
2. Put garment on customer.
3. Mark areas needing adjustment.
4. Take garment off customer.
5. Transfer markings to inside of garment.
6. Make adjustments in garment.

Custom Sewing

Applying Fasteners
Unit V

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1					1-14	
G1	2				1, 2	17, 19-20, 23	
G2	3				3	16, 18	
G2	4				4		
G4	5				5	24	
G3	6				6	22	
G5	7				7		
G6	8				8	25	
G7	9				9	21	
G8	10				10, 11	15	

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

APPLYING FASTENERS

UNIT V

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to apply fasteners when needed both in construction and in altering garments/products. Competencies will be demonstrated by correctly performing the procedures outlined in the Job Sheets and by scoring at least 85 percent on the Unit Test.

SPECIFIC OBJECTIVES

Upon completion of this unit, the student should be able to:

1. Based on the content outline, MATCH TERMS ASSOCIATED WITH FASTENERS TO THE CORRECT DEFINITIONS by achieving 100 percent accuracy on the Unit Test.
2. Based on the content outline, SEW ON BUTTONS by completing Job Sheets 1 and 2 and by achieving 100 percent accuracy on the Unit Test.
3. Based on the content outline, MAKE BUTTONHOLES by completing Job Sheet 3 and by achieving 100 percent accuracy on the Unit Test.
4. Based on the content outline, MAKE BUTTONLOOPS by completing Job Sheet 4 and by achieving 100 percent accuracy on the Unit Test.
5. Based on the content outline, SEW ON SNAPS by completing Job Sheet 5 and by achieving 100 percent accuracy on the Unit Test.
6. Based on the content outline, ATTACH EYELETS by completing Job Sheet 6 and by achieving 100 percent accuracy on the Unit Test.
7. Based on the content outline, ATTACH HOOKS AND EYES by completing Job Sheet 7.
8. Based on the content outline, ATTACH TAPE FASTENERS AND VELCRO® by completing Job Sheet 8 and by achieving 100 percent accuracy on the Unit Test.
9. Based on the content outline, CONSTRUCT A BELT by completing Job Sheet 9 and by achieving 100 percent accuracy on the Unit Test.
10. Based on the content outline, ATTACH ZIPPERS by completing Job Sheet 10 or 11 and by achieving 100 percent accuracy on the Unit Test.

APPLYING FASTENERS

UNIT V

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Provide students with Objective Sheet.

C. Discuss Unit and Specific Objectives.

D. Provide students with Information Sheet.

E. Discuss the Information Sheet.

F. Provide students with Job Sheets. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

G. Integrate the following activities throughout the teaching of this unit:

1. Introduce the unit by explaining the terminology provided on the Information Sheet.

(NOTE: Show examples when possible.)

H. Give test.

I. Evaluate test.

J. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Job Sheets

1. JS 1--Attach Sew-Through Button
2. JS 2--Attach Shank-type Button
3. JS 3--Construct Buttonholes
4. JS 4--Construct Button Loops

5. JS 5--Attach Snaps
6. JS 6--Attach Eyelets
7. JS 7--Attach Hooks and Eyes
8. JS 8--Attach Velcro® and Snap Tape
9. JS 9--Construct Belt
10. JS 10--Insert Centered Zipper
11. JS 11--Insert Front-Fly Zipper

F. Unit Test

G. Answers to Unit Test

RESOURCES

(NOTE: See Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

APPLYING FASTENERS

UNIT V

INFORMATION SHEET

I. Terms and definitions

(Objective 1)

A. Beeswax--used to strengthen regular thread and help prevent knotting

B. Belt--strip of fabric (usually matching) which is placed at the waistline of a garment. It is usually either all fabric and tied, or a covered piece of stiffening with a buckle.

C. Belting--stiff, ribbon-like banding used inside a waistline as a stay or covered with fabric and used outside as a belt

D. Belt loop--thread or fabric loop used to hold belt in place

E. Button--used to close a garment and to accent; comes in two types, sew-through and shank

F. Button foot--a small machine foot used to apply buttons

G. Eyelet--small hole in a garment or belt, finished by handstitching or a metal ring; used for drawstrings, cuff links, and to hold the prong of a buckle.

H. Hook and eye--closure made of metal used to hold two pieces of fabric together securely (often on necklines and waistbands)

I. Loop--fastener made of thread, cording, or fabric that extends past the finished edges of a garment on closings that do not overlap

J. Shank--a stem between the fabric and the button; may be part of the button or made with thread while sewing on a button

K. Snap--closure made of metal in two parts, a ball and a socket; used in dressmaking to close an opening

L. Velcro®--fastener made from two nylon tape strips of looped pile that intermesh when pressed together. One strip is fleece covered and the other is burr covered.

M. Zipper--closure made of metal or nylon chains attached to a tape so that it can be stitched into a placket

N. Zipper foot--small machine foot with one prong; used for stitching in zippers; usually adjustable for right or left side application

II. Sewing on a button; making buttonholes

(Objectives 2, 3, 4; JS 1, 2, 3, 4)

A. About buttons

1. Buttons serve two purposes: utility (fastener) and design or decoration.
2. Buttons come in many sizes, shapes, and colors.
3. Buttons may match the fashion fabric or contrast with it. Buttons may give a tailored, dressy, or casual look to a garment.
4. Buttons should complement the fabric and design of the garment.
5. Buttons should be in correct proportion to the wearer.
6. When a pattern is altered, button placement will probably change.

B. About buttonholes

1. Buttonholes or button loops finish the fastener application.
2. They can be made by hand or by machine.
3. Many types of buttonhole attachments are available for sewing machines.
4. Bound buttonholes add a dressy look to a tailored garment.
5. Menswear sometimes requires a keyhole buttonhole.
6. Buttonholes require good interfacing for reinforcement. Some may require double stitching.
7. Always make a trial buttonhole in fabric exactly like the garment.
8. Buttonholes are always made before the buttons are sewn on the garment.

C. Button placement

1. Place a button at every point of stress.
2. Place a button at the waistline of a fitted garment unless a belt is to be worn.
3. If a belt is to be worn, place buttons above and below the belt so they do not interfere with it.
4. Place a button at the fullest part of the bust to prevent gaping.
5. To determine button placement, lap buttonhole side of garment over the button side, matching center front lines, and pin securely between the buttonholes. Place a pin through the center of each buttonhole to mark placement.

D. Buttonhole placement

1. If alterations have been made, do not use pattern guide for placement.
2. Place the top buttonhole down one-half the width of the button plus 1/4" to permit easy buttoning.
3. The last buttonhole should be 3" to 4" above the finished edge. It should never go through the hem.
4. Horizontal buttonholes are more secure and used more often than vertical ones because they are parallel to areas of stress. They are usually placed 1/2" from the finished edge of the garment.
5. Vertical buttonholes are used mainly in tailored shirts that have a stitched band running up and down. They should be placed close enough together to keep the garment closed.
6. Buttonhole size is determined by the size and shape of the button. It is generally equal to the diameter of the button plus the thickness.

7. Never make a buttonhole for a button you do not have.
8. Always make a trial buttonhole in fabric exactly like the garment, including interfacing. Try the button in it.

E. Steps for sewing on a sew-through button

1. Thread needle with a double strand of thread. Knot the end.
2. Take a small stitch on the right side of the fabric where the button will be and then a second stitch in the same place. The knot will then be hidden under the button.
3. Lay button in place and put a large needle or toothpick over it, between the holes.
4. Sew from the back of the button to the front and down again, over the toothpick, to the wrong side.
5. Continue taking stitches over the toothpick until button is secure.
6. Remove the needle or toothpick, lift the button, and wind the thread tightly under the button to form the thread shank. The amount of shank needed is determined by weight of fabric. ***(See Fig. 5-1.)***
7. Make a small knot on the underside of the button by looping the thread around the needle and pulling the needle through the loops between the fabric and the button.

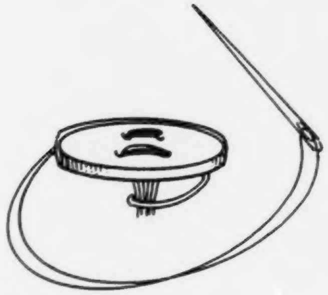


FIG. 5-1

F. Steps for sewing on a shank-type button

1. Take a tiny stitch on the right side of fabric where button will be and secure the thread.
2. Place button over first stitch and bring needle through shank of button. Pull tight.
3. Continue stitching through fabric and then through button shank 6 or 8 times.
4. With needle, pick up several of the button stitches and pull needle through the loops between fabric and button. If button is in an area of great stress, make two knots.

G. Button sewn by machine

1. Put button foot on sewing machine and set machine for zigzag stitch. Set stitch width on 1. (Setting will depend on the size of the button. Always make first stitch by hand to avoid breaking needles.)
2. Release feed-dogs. Position button under foot so that needle is in left hole. Lower foot.
3. Turn handwheel toward you until needle is above the foot; set stitch width to size of button; the needle should then be in right hole of button.
4. Take approximately 6 to 8 zigzag stitches, ending in the left hole.
5. To tie off and fasten threads, reset machine at a width of 1 and take three stitches.

(NOTE: One disadvantage of machine sewn buttons is that the inside of garment is not as neat as it is with hand sewn buttons.)

H. Steps for making machine buttonholes

(NOTE: Buttonhole attachments vary on different models and brands of sewing machines. Students should learn to use as many different types as possible.)

1. Thread machine and attach buttonhole attachment.

(NOTE: Some machines require variations in threading.)

2. Cut a 7" by 7" piece of fabric and fold it in half. Place a scrap of interfacing inside the fabric.
3. Place a row of basting thread 5/8" from the edge to serve as the center front line.
4. Mark placement for a horizontal and a vertical buttonhole.
5. Place fabric under attachment and make buttonholes, using machine instruction booklet for step-by-step procedure.

I. Button loops

1. Button loops are a smaller version of the belt loops constructed in Unit IV.
2. A crocheted or chain-stitched loop may be attached at the back or front neckline opening. They are made exactly like belt loops. Anchor the chain well at both ends.
3. Fabric button loops are often found on fancy dresses instead of buttonholes. Tiny fabric loops are common on wedding dresses. They may be located at center front, center back, or at a side opening.
4. Procedure for constructing fabric button loops
   a. The length of each loop is determined by the size of the button. They are usually as narrow as possible.
   b. Cut a strip of bias fabric the length of all the button loops plus 1" each for the seam allowance. Fold the strip in half, right sides together, with a length or more of fine string, buttonhole twist, or thread running the full length of the strip on the **inside of the fold.**
   c. Sew with tiny machine stitches across one end, **catching the string, buttonhole twist, or thread in the stitching.** Sew down the side, being careful not to catch the thread in the seam. Do not sew across the end.
   d. Pull on strings or threads **gently** so that the strip is turned inside out.
   e. Cut into appropriate lengths.
   f. Attach to garment by pinning to opening edge, with ends extending 1/2" into seam allowance. ***(See Fig. 5-2.)***

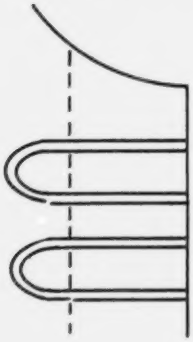


FIG. 5-2

III. Snaps

(Objective 5; JS 5)

A. Snaps are functional fasteners sewn inconspicuously to the inside of a garment.

B. Snaps are used in areas where there is a minimum amount of strain.

C. Snaps come in a wide range of sizes and types and in nickel or black enamel-coated metal.

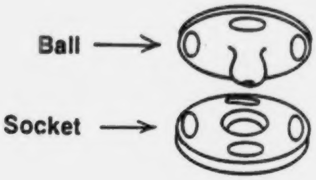


FIG. 5-3

D. Snaps are made up of two parts: a ball and a socket. ***(See Fig. 5-3.)***

1. The ball half is sewn to the overlapping garment edge.
2. The socket half is sewn to the underlap.

E. To sew on the snap

1. First sew on the ball half, taking small handstitches close together through each hole and being careful to pick up a thread of the garment with each stitch. Stitches should not show on the right side of the garment.
2. Carry the thread under the snap from hole to hole.
3. To mark the position for the socket half of the snap, rub tailor's chalk on the ball half of the snap and carefully close the garment as you would when it is finished. The chalk will rub off and mark the position for the socket.
4. Sew on the socket half the same way as the ball half.

F. Large, silk-covered snaps can be purchased for coats and suits. These come in many sizes and colors or can be covered using the lining or underlining fabric.

G. To cover a snap

1. Cut two circles of fabric twice the diameter of the snap.
2. Handstitch a running stitch around the outside edge.
3. Make a small hole in the center of each circle and force the ball of the snap into the hole.
4. Pull thread in fabric tightly around snap.
5. Secure thread ends by taking several stitches into the fabric.
6. Cover the socket half of the snap by placing the hole of fabric directly over the hole of the socket.
7. A small dab of glue around the ball and the socket area will prevent fabric from fraying. Be sure to blot the glue.

H. Procedures for sewing on a fabric-covered snap

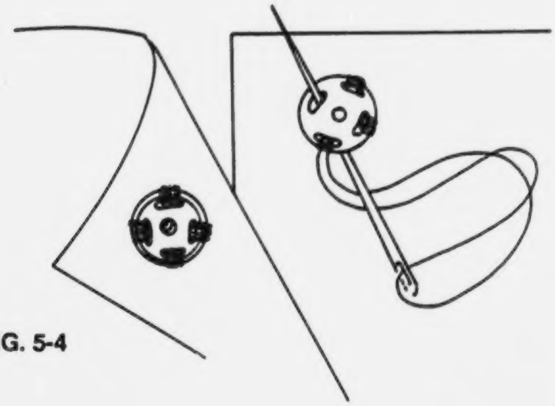


FIG. 5-4

1. Take a tiny stitch in right side of fabric where snap will be placed.
2. Place snap over stitch. Insert needle into fabric and hole of the snap.

3. Make a buttonhole stitch by wrapping thread around needle in a clockwise direction.
4. Pull needle and thread through. Take 4 or 5 stitches in the hole.
5. To move to next hole, insert needle into fabric, carry it between fabric layers, and bring it out near the next hole. Take 4 to 5 stitches in hole. ***(See Fig. 5-4.)***
6. Continue until stitches are made in all the holes. Secure thread by making a small knot.

I. Gripper snaps have metal teeth and are attached to the garment with a special pliers or an attaching tool that comes with them.

IV. Eyelets

(Objective 6; JS 6)

A. An eyelet is a round opening in the garment used for drawstrings, cuff links, or the prong of a belt buckle. An eyelet may be made by hand and resemble a buttonhole or may be metal and be attached with a special tool.

B. Procedure for making an eyelet

1. Mark placement for eyelet.
2. Sew with small running stitches around the marked place.
3. Cut opening the desired size.
4. Bring needle up from back, leaving a tail of 1". Work buttonhole stitches all around the opening, very close to the edge. Catch the tail under the stitches on the back. Fasten threads securely on the wrong side.

OR

Follow instructions on package for using tool to attach metal eyelets.

V. Hooks and eyes

(Objective 7; JS 7)

A. Hook and eye closures are usually used at necklines and waistbands.

B. They are available in brass, nickel, black enamel-coated metal, and in some colors.

C. Two types of hooks and eyes are available.

1. Straight eyes are used for lapping applications.
2. Rounded eyes are used where the edges of the garment just meet.

D. They range in size from the very smallest, 005, to the largest, No. 5.

E. To attach hooks and eyes

1. Position the hook section on the wrong side of the overlapping edge with hook 1/16" from the edge.
2. Use small handstitches around the circular holes and across the end of hook, picking up a thread of the garment with each stitch.
3. To position the eye, close the garment and mark the spot where the hook touches the underlapped edge.

    a. If using the straight eye, place the curve toward the garment edge.
    b. If using the rounded eye, position eye slightly over the garment edge so that the garment edges meet exactly when closed.
4. Work small, neat handstitches around the holes.

F. Large, flat hooks and eyes make sturdy fasteners for waistbands on slacks and skirts. They come in black and nickel-plated metals and sew-on and prong types.

G. Covered hooks and eyes are suitable for suits, coats, and jackets. They come in a variety of colors and sizes. To cover your own, use matching thread and small blanket stitches very close together until the metal is completely covered.

H. Steps for sewing on a hook

1. Secure thread by taking a stitch in fabric where the hole of the hook will be placed.
2. Place hole of hook over stitch. Insert needle into fabric and hole.
3. Make buttonhole stitch by wrapping thread around needle in a clockwise direction. Pull needle and thread through.
4. Take 5 or 6 stitches in each hole. *(See Fig. 5-5.)*
5. To secure curved end of hook, insert needle into fabric, sew between fabric layers, and bring out near hook.
6. Insert needle in fabric on either side of hook. Sew between fabric layers and bring out near hook. Pull needle and thread through. Thread should lie flat across hook to secure it to the fabric. Take 4 or 5 stitches across hook.
7. Secure threads by making a small knot.

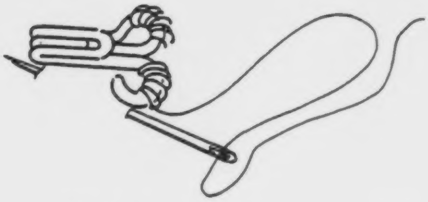


FIG. 5-5

I. Sewing on eyes--straight or round

1. Secure thread by taking a stitch in fabric where the eye will be placed.
2. Place hole of eye over stitch. Insert needle into fabric and the hole of the eye.
3. Make a buttonhole stitch by wrapping the thread around the needle in a clockwise direction. Pull needle and thread through.
4. Take 4 to 5 stitches in the hole.

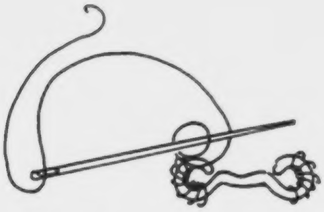
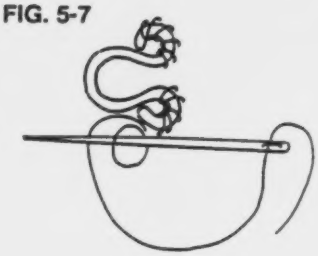


FIG. 5-6

FIG. 5-7



5. To stitch other hole, insert needle into fabric layers and bring it out near other hole.

6. Take 4 to 5 stitches in second hole. Secure thread by making a small knot in fabric. ***(See Figs. 5-6 and 5-7.)***

VI. Attaching tape fasteners

(Objective 8; JS 8)

A. Velcro® (nylon tape)

1. Velcro® is used in buckleless belts, waistbands, jacket fronts, sportswear, slip covers, and many household accessories.
2. Velcro® is more bulky than most fasteners; it is used in heavyweight fabric.
3. Velcro® comes in several widths and colors, by the yard, or in precut shapes in packages.
4. Keep tape closed to cut and press flat with a warm iron.
5. Either side may be sewn to the garment first, but the fleece (soft) side is placed on the section that comes in contact with the body. ***(See Fig. 5-8.)***

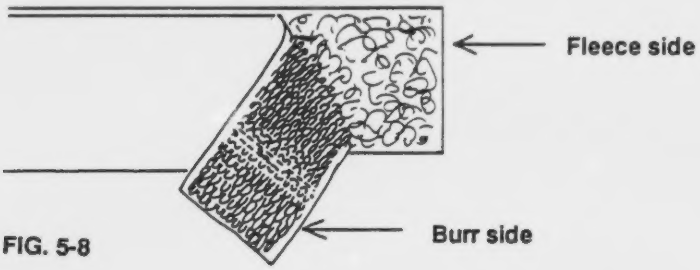


FIG. 5-8

B. Steps for applying Velcro®

1. Separate the two sides of the tape.
2. Pin the fleece side, right side up, to facing of the overlap. Place 1/8" from the folded edge.
3. Machine stitch around edge of tape through all layers.
4. Lap closing, position burr side in place, and machine stitch around all edges.

(NOTE: If garment or product cannot have stitching showing on outside, the burr side may be applied with a unique stitch or with a glue gun. In some instances, Velcro® can be applied to a facing before construction of garment/product is completed so that stitching does not show.)

C. Snap tape

1. Heavy snaps applied to a 2" wide tape may be purchased by the yard for use on heavy fabric.
2. Snap tape is used in children's play clothes, on jackets, and in slip-covers or large cushions which will be removed for laundering.
3. On large projects such as slip-covers, the tape should be staystitched between the snaps at 6" or 8" intervals. ***(See Fig. 5-9.)***

D. Steps for applying snap tape

1. With tape closed, cut to desired lengths.
2. Pin in place on product with ball side on the underlap.
3. Sew in place around all outside edges by machine.
4. Sew top side in place around all edges.

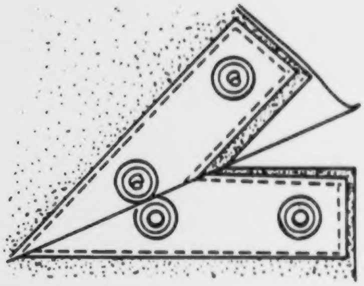


FIG. 5-9

VII. Making belts and belt loops

(Objective 9; JS 9)

A. Belts add the finishing touch to a garment.

1. Belts should be suitable to the garment and your figure.
2. The wider the belt, the more it calls attention to the waistline.

B. Self belts

1. These belts should have stiffening added for neatness and shape retention.
2. Commercial belting is probably the best stiffening. It comes in several widths and can be purchased by the yard.
3. For a softer look and feel, grosgrain ribbon or interfacing can be used.

(NOTE: Always preshrink grosgrain ribbon.)

C. Belts with a buckle

1. The belt should be about 1/8" narrower than the inside buckle measurement.
2. The belt should be cut about 6" longer than the waistline to allow for overlap and buckle application.

D. Tie belts

1. Tie belts are very easy to make.
2. Usually, 20"-30" plus the waist measurement makes a good length.
3. Widths can vary, but the narrower a belt is, the less it will roll at the hipline.
4. Belting can be added if desired. Cut the belting 1" shorter than the waistline measurement and slip into opening where belt was turned. Round edges allow the fabric to crush and tie into a smooth knot.

E. Belt carriers or belt loops

1. Hold the belt in position at the natural waistline.
2. Belt loops can be made from narrow strips of fabric or from matching thread.
3. Belt loops should be 1/8" to 1/4" larger than the width of the belt so it will slide through easily.

4. See Construction Techniques, Unit IV, for directions for making belt loops and carriers.

F. Steps for constructing a tie belt

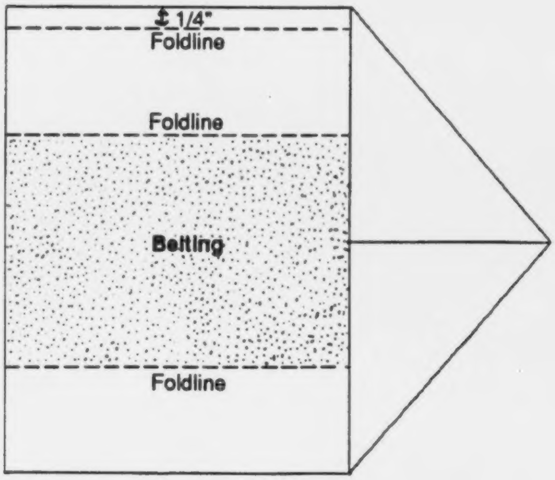
1. Cut a piece of fabric. The piece should be 1" longer than the desired length of the belt, and 1" wider than the desired width.
2. Pin fabric, wrong sides together, down the entire length of the belt.
3. Machine stitch (10 stitches per inch), starting in the middle of the belt. Sew a 1/2" seam down one side, pivot at the corner, and sew across end. Backstitch to secure thread.
4. Repeat step #3, sewing toward other end of belt, leaving a 1-1/2" to 2" opening unsewn at the center of belt.
5. Trim seam to 1/4" and push belt through the hole left in the middle. A pencil or dowel rod works well to help push fabric through.
6. Press belt thoroughly on outside, making sure crease is flat and smooth and that sewing line is at bottom of belt.
7. Use a small slipstitch to hand sew the opening closed. Handwork should be as invisible as possible.

G. Steps for constructing a covered belt

(NOTE: Use purchased belt buckle or a belt buckle from a kit.)

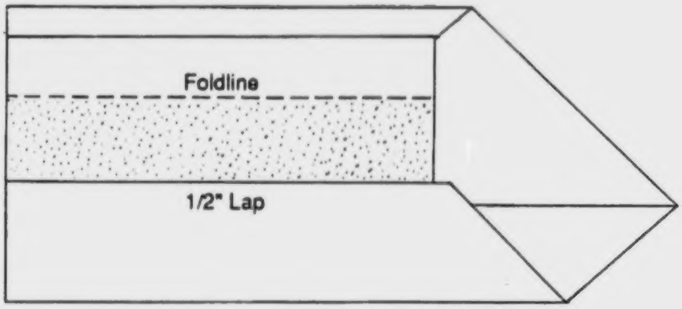
1. Cut belting material 6" longer than waist measurement to allow for buckle application and overlap.
2. Steam press belting to shrink it and make it softer and easier to handle.
3. On lengthwise grain, carefully cut fabric twice the width of the finished belt plus 3/4". Cut length 6" longer than waistline measurement.
4. Fold one end of belting in half lengthwise. Cut end to make a point.
5. Fold one end of belt fabric lengthwise, wrong side out. Stitch end. Trim to 1/8"; press open.

FIG. 5-10



6. Turn end right side out. Open and fold toward other end to form a point. Push point out carefully. Insert belting material; press point. ***(See Fig. 5-10.)***

FIG. 5-11



7. Fold down 1/4" on one lengthwise edge; press. Fold up other lengthwise edge where fabric meets belting. Press. (Belting will be nearly encased by fabric.) ***(See Fig. 5-11.)***
8. Fold remaining lengthwise edge down; press. Slipstitch or use iron-on fusing web to close belt.
9. Belts may be topstitched on both sides.
   (NOTE: This works well when canvas or interfacing has been used, but belting is difficult to topstitch and there is the danger of breaking needles.)
10. Attach the buckle to the straight end of the belt. Work eyelets or attach metal eyelets in belt where needed.

H. Steps for making thread belt loops

1. Thread a sewing needle with matching thread. Fasten the thread securely in the marked position and bring thread to the outside. Take one stitch to produce a loop.

FIG. 5-12

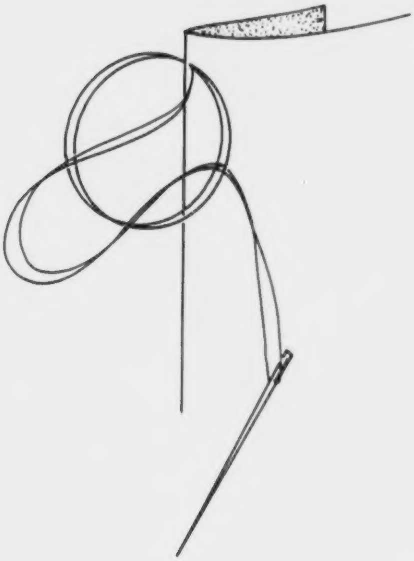
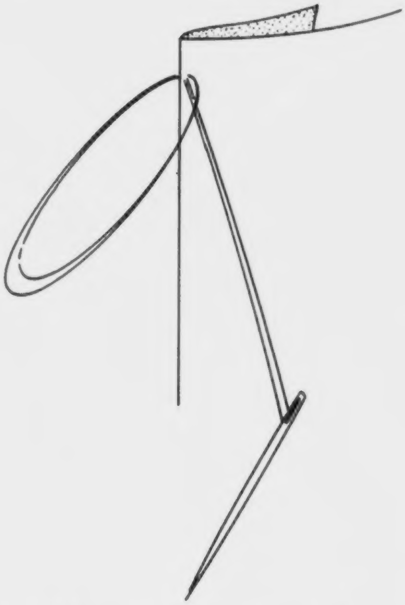


FIG. 5-13



2. Reach through the loop with your fingers and draw out the thread to make a second loop. ***(See Figs. 5-12 and 5-13.)***

3. Draw thread up snugly. Reach through the second loop to make the third loop. Continue making loops until chain is long enough.
4. Pull the thread and needle entirely through the last loop to knot it. Put the needle through to the inside of the garment again and fasten threads securely.

I. Fabric belt loops (See construction instructions in Unit IV.)

VIII. Zippers

(Objective 10; JS 10, 11)

A. Zippers provide a fast, easy way of getting in and out of clothing.

B. Zippers come in a wide variety of colors, sizes, and weights; they are available for every type and weight of fabric.

C. Choosing a zipper for a particular fabric takes time and experience.

1. The conventional zipper, the most common type, can be used for most standard zipper applications in most garments.
2. Specialty zippers for special garments are also available.
3. A coil-constructed zipper:
    a. Is made from a continuous strand of nylon or polyester twisted into a spiral and attached to a tape
    b. Is light, flexible, very strong, and ideal for lightweight fabrics and all types of knits
    c. Is very easy to repair. If fabric catches in the teeth, bend the zipper in half, pinch the fold, and twist to open. Pull the slider down past the opening and then up again.
4. A chain-constructed zipper:
    a. Has either metal or plastic teeth attached to a cotton-blend tape
    b. Is a little heavier and is used in heavy applications
5. The pattern will specify the length of zipper used in the design. If the pattern has been altered, the zipper length may require adjusting.

D. Zippers can be applied by machine or by hand. Types of zipper applications include:

1. Conventional
2. Separating
3. Two-way
4. Trouser
5. Blue jean
6. Decorative or industrial
7. Invisible

E. Steps for inserting a centered zipper

1. Machine baste seam where zipper is to be inserted.
2. Press seam open.
3. With zipper closed, start at the top and pin zipper in place. Make sure that zipper tape and fabric are even. Use basting tape or pin. If using pins, place them diagonally about

1" apart with points toward the seamline. Pin down one side and then down the other side. ***(See Fig. 5-14.)***

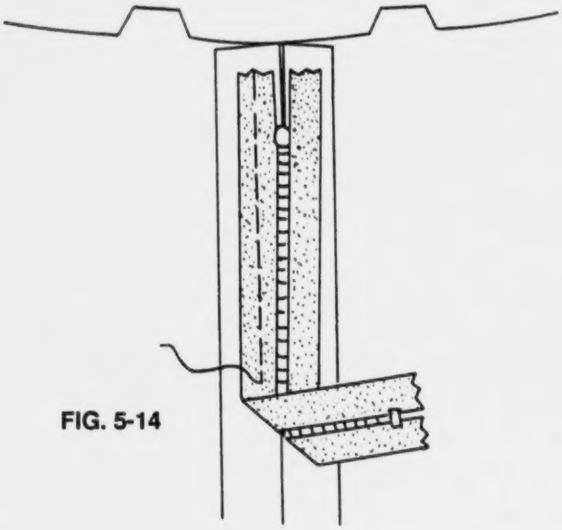


FIG. 5-14

4. Put zipper foot on machine.
5. Open the zipper about 1-1/2" down. Stitch 3/8" to the right of basted seam, starting at top and stitching down. Remove pins as you get to them.
6. After stitching approximately 1-1/4", stop machine, leaving needle in place.
7. Raise zipper foot, pull zipper tape closed, and continue stitching.
8. Stitch to the bottom of the zipper. Turn a square corner, stitch across the bottom (count stitches on each side of seam), turn around square corner, and stitch up left side of zipper about 1-1/2".
9. Raise zipper foot with needle in fabric, open the zipper again about 1-1/4" down, and finish stitching to the top of zipper.
10. Remove basting thread and press.

F. Steps for inserting a front-fly zipper

1. Mark center fronts of garment at waistline and center dot below the zipper.
2. Clip the left seam allowance below the fly extension. On left seam allowance, move over 3/8". Press from center front to form an extension for zipper.
3. Press front extension under. Press overlap along center front line and underlap along foldline.
4. Baste.
5. Place closed zipper under the left front extension only, with teeth near seamline and zipper tab 1/8" below waistline. Hold zipper in place with pins or double-faced basting tape. ***(See Fig. 5-15.)***
6. Using a zipper foot, machine baste along zipper tape guidelines.
7. Close zipper and turn garment right side up. With zipper foot, stitch close to fabric fold through all thicknesses.
8. Lap right front over zipper and baste.
9. On outside, baste zipper tape to right front through all thicknesses. ***(See Fig. 5-16.)***

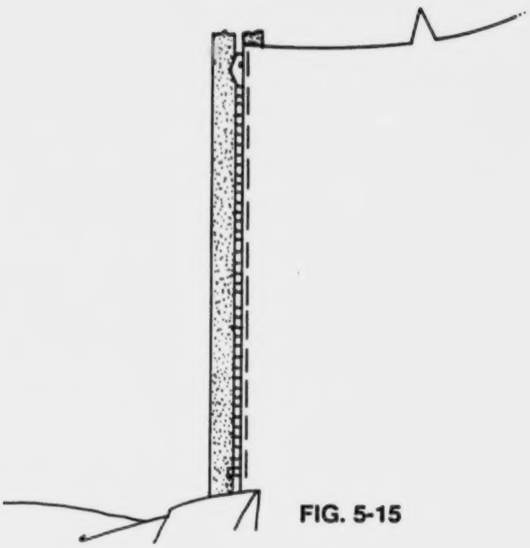


FIG. 5-15

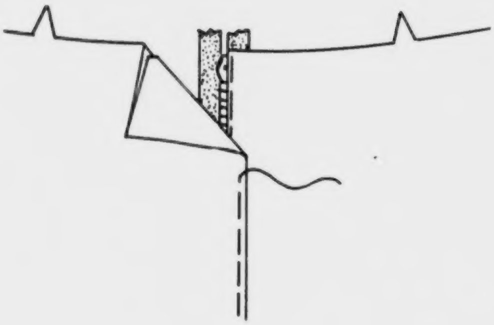


FIG. 5-16

10. Check that zipper is smooth and zipper tape is caught securely.
11. Stitch close to basting line, securing threads at top and bottom by backstitching. (On curved area, instead of backstitching, leave needle in fabric, raise presser foot, pivot fabric, and stitch back in same stitching line 3 to 4 stitches.)
12. Remove basting.

APPLYING FASTENERS

UNIT V

JOB SHEET 1--ATTACH SEW-THROUGH BUTTON

Materials and equipment:

Sew-through type button
Fabric or garment
Basic sewing supplies

Steps of Procedure:

1. Thread needle.
2. Secure thread in fabric and hide knot.
3. Place toothpick or needle over the button.
4. Sew in place. Remove toothpick or needle.
5. Wind thread to form shank.
6. Knot thread.

APPLYING FASTENERS

UNIT V

JOB SHEET 2--ATTACH SHANK-TYPE BUTTON

Materials and equipment:

Shank-type button
Fabric or garment
Basic sewing supplies

Steps of Procedure:

1. Thread needle.
2. Secure thread in fabric and hide knot.
3. Place button and sew.
4. Knot thread.

APPLYING FASTENERS

UNIT V

JOB SHEET 3--CONSTRUCT BUTTONHOLES

Materials and equipment:

Sewing machine with buttonhole-making capacity
Machine instruction manual
Scraps of fabric and interfacing
Fabric marker
Button

Steps of Procedure:

1. Thread machine and attach buttonhole attachment.

   OR

   Set machine for making buttonholes.

2. Sew "center front line" on fabric scrap.

3. Mark placement for a horizontal and a vertical buttonhole, using button to determine size.

4. Make machine buttonholes.

APPLYING FASTENERS

UNIT V

JOB SHEET 4--CONSTRUCT BUTTON LOOPS

Materials and equipment:

Garment ready for button loops
Fabric for button loops
Basic sewing supplies

Steps of Procedure:

1. Cut fabric along bias.
2. Fold in half and place cord in fold.
3. Stitch across top and down side.
4. Turn strip right side out.
5. Cut strip into desired lengths.
6. Attach to garment by sewing into seam.

APPLYING FASTENERS

UNIT V

JOB SHEET 5--ATTACH SNAPS

Materials and equipment:

Snap
Fabric
Basic sewing supplies

Steps of Procedure:

1. Sew ball half of snap in place.

2. Mark position for socket half.

3. Sew socket half in place.

APPLYING FASTENERS

UNIT V

JOB SHEET 6--ATTACH EYELETS

Materials and equipment:

Metal eyelets
Attaching tool
Fabric

Steps of Procedure:

1. Mark position for eyelet.
2. Sew with small running stitches around marking.
3. Cut opening.
4. Attach eyelet, following directions on package.

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APPLYING FASTENERS

UNIT V

JOB SHEET 7--ATTACH HOOKS AND EYES

Materials and equipment:

Hook and eye
Fabric
Basic sewing kit

Steps of Procedure:

1. Secure thread in fabric for hook.
2. Sew first hole of hook.
3. Sew second hole.
4. Secure curved end of hook.
5. Secure threads.
6. Secure thread in fabric for eye.
7. Sew first hole in eye.
8. Sew second hole.
9. Secure threads.

APPLYING FASTENERS

UNIT V

JOB SHEET 8--ATTACH VELCRO® AND SNAP TAPE

Materials and equipment:

Velcro® or snap tape
Fabric
Basic sewing supplies

Steps of Procedure:

1. Cut Velcro® or snap tape to desired lengths and separate.
2. Sew ball side of snap tape to underlap.

   OR

   Sew burr side of Velcro® to underlap.
3. Sew top side of snap tape to overlap.

   OR

   Sew fleece side of Velcro® to overlap.
4. Staystitch snap tape, if necessary.

APPLYING FASTENERS

UNIT V

JOB SHEET 9--CONSTRUCT BELT

Materials and equipment:

Belting
Fashion fabric
Belt buckle
Basic sewing supplies
Iron-on fusing web (optional)

Steps of Procedure:

1. Cut belting material 6" longer than waist measurement.
2. Cut fabric twice the width of the finished belt plus 3/4"; cut fabric length 6" longer than waistline measurement.
3. Steam-shrink belting.
4. Cut point at one end of belting.
5. Fold one end of belt fabric lengthwise, wrong side out. Stitch end. Trim to 1/8"; press open.
6. Turn end right side out. Open and fold toward other end to form a point. Push point out carefully. Insert belting material; press point.
7. Fold down 1/4" on one lengthwise edge; press. Fold up other lengthwise edge where fabric meets belting. Press.
8. Fold remaining lengthwise edge down; press. Slipstitch or use iron-on fusing web to close belt.
9. Topstitch, if desired.
10. Attach belt buckle and make eyelets in belt where needed.

APPLYING FASTENERS

UNIT V

JOB SHEET 10--INSERT CENTERED ZIPPER

Materials and equipment:

Zipper
Zipper foot for sewing machine
Fabric
Basting tape (optional)
Basic sewing supplies

Steps of Procedure:

1. Machine baste seam.

2. Tape or pin zipper in place.

3. Attach zipper foot to machine.

4. Open zipper 1-1/4" down. Stitch down partway. Close zipper and continue stitching to bottom of zipper.

5. Turn corner, stitch across bottom, and turn corner. Stitch up partway.

6. Open zipper 1-1/4" down. Finish stitching to the top of zipper.

7. Remove basting threads and press.

APPLYING FASTENERS

UNIT V

JOB SHEET 11--INSERT FRONT-FLY ZIPPER

Materials and equipment:

Zipper
Zipper foot for sewing machine
Fabric
Basting tape (optional)
Basic sewing supplies

Steps of Procedure:

1. Mark center fronts of garment at waistline and center dot below zipper.

2. Clip seam allowance below fly extensions.

3. Move under-extension foldline over 3/8". Press under. Press overlap along center front line and underlap along foldline.

4. Baste.

5. Place closed zipper under the left front extension. Hold in place with pins or basting tape.

6. Machine baste in place.

7. Turn garment right side up. Stitch through all thicknesses.

8. Lap right front over zipper and baste.

9. Baste zipper tape to right front through all thicknesses. Check.

10. Stitch close to basting line.

11. Remove basting.

APPLYING FASTENERS

UNIT V TEST

Part I--Matching: Match each term with its definition by writing the letter in the space provided.

a. Beeswax
b. Belt
c. Belting
d. Belt loop
e. Button
ab. Button foot
ac. Eyelet
ad. Hook and eye
ae. Loop
bc. Shank
bd. Snap
be. Velcro®
cd. Zipper
ce. Zipper foot

___ 1. Closure made of metal in two parts, a ball and a socket; used in dressmaking to close an opening

___ 2. Strip of fabric, usually matching, placed at the waistline of a garment. It is usually either a tie belt or a covered piece of stiffening with a buckle.

___ 3. A small machine foot used to apply buttons

___ 4. A stem between the fabric and the button; may be part of the button or made with thread while sewing on a button

___ 5. Thread or fabric loop used to hold a belt in place

___ 6. Fastener made from two nylon tape strips of looped pile that intermesh when pressed together. One strip is fleece covered, and the other is burr covered.

___ 7. Small hole in a garment or belt, finished by handstitching or a metal ring; used for drawstrings, cuff links, and to hold the prong of a buckle

___ 8. Closure made of metal or nylon chains attached to a tape so that it can be stitched into a placket

___ 9. Used to close a garment and to accent; comes in two types, sew-through and shank

___ 10. Small machine foot with one prong, usually adjustable for right or left side application; used for stitching in zippers

___ 11. Used on regular thread to strengthen it and help prevent knotting

___ 12. Stiff, ribbon-like banding used inside a waistline as a stay or covered with fabric and used outside as a belt

___ 13. Closure made of metal; used to hold two pieces of fabric together securely (often on necklines and waistbands)

___ 14. Fastener made of thread, cording, or fabric that extends past the finished edges of a garment on closings with no lap

Part II--Completion: Complete the statements by filling in the blanks.

15. The fabric that a zipper is made of is referred to as the ______________ .

16. A buttonhole sometimes found in menswear is called a ________________ buttonhole.

17. A button is sewn at the fullest part of the bust to ____________________ .

18. To determine the length of a buttonhole, measure ____________________________________ of the button.

19. If you alter a garment you may have to adjust placement of the ________________ .

20. __________ strands of thread are used to sew on buttons.

21. Belt loops can be made from ______________ or ______________ .

22. A small hole in a garment finished with a metal ring or thread is called ________________ .

23. Buttons come in two basic types. These are ___________ and ______________ .

24. The two parts of a ______________ are the ball and the socket.

25. A fastener made from two strips or circles of tape having looped pile that intermesh when pressed together is called _________________ .

APPLYING FASTENERS

ANSWERS TO UNIT V TEST

Part I:

1. bd
2. b
3. ab
4. bc
5. d
6. be
7. ac
8. cd
9. e
10. ce
11. a
12. c
13. a
14. ae

Part II:

15. tape
16. keyhole
17. prevent gaping
18. diameter and thickness
19. buttonholes/buttons
20. two
21. self-fabric or thread
22. eyelet
23. shank and sew-through
24. snap
25. Velcro®

Custom Sewing

Applying Trims and Finishes
Unit VI

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1			1			
H1	2				1, 2		
H2	3				3		
H3, H11, H12	4				4		
H4	5				5		
H4	6				5		
H5	7				6		
H6	8				7		
H7, H8	9				8		
H9	10				9		
H10	11				10, 11		
H13	12				12		

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

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APPLYING TRIMS AND FINISHES

UNIT VI

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to apply different types of decorative trims and finishes. Competencies will be demonstrated by correctly performing the procedures outlined in the Assignment and Job Sheets.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Based on the content outline, MATCH TERMS WITH DEFINITIONS by completing Assignment Sheet 1.

2. Based on the content outline, APPLY APPLIQUE by completing Job Sheets 1 and 2.

3. Based on the content outline, APPLY BRAID by completing Job Sheet 3.

4. Based on the content outline, MAKE AND APPLY CORDING OR PIPING by completing Job Sheet 4.

5. Based on the content outline, APPLY DECORATIVE STITCHES BY MACHINE by completing Job Sheet 5.

6. Based on the content outline, APPLY DECORATIVE STITCHES BY HAND by completing Job Sheet 5.

7. Based on the content outline, APPLY LACE (FLAT AND RUFFLED) by completing Job Sheet 6.

8. Based on the content outline, APPLY LETTUCE LEAF AND RUFFLED EDGE by completing Job Sheet 7.

9. Based on the content outline, APPLY SEQUINS AND BEADS by completing Job Sheet 8.

10. Based on the content outline, MARK AND SMOCK A PIECE OF FABRIC by completing Job Sheet 9.

11. Based on the content outline, CONSTRUCT AND CUT CONTINUOUS BIAS by completing Job Sheets 10 and 11.

12. Based on the content outline, MAKE A TUBING FOR A TIE by completing Job Sheet 12.

APPLYING TRIMS AND FINISHES

UNIT VI

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Provide students with Objective Sheet.

C. Discuss Unit and Specific Objectives.

D. Provide students with Information Sheet.

E. Discuss the Information Sheet.

F. Provide students with Assignment and/or Job Sheets.

   1. Assignment Sheet 1 may be used as part of a Unit Test, if desired.
   2. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

G. Integrate the following activities throughout the teaching of this unit:

   1. Introduce the unit by explaining the terminology provided on the Information Sheet.
   2. Make or provide samples of each type of trim and decorative finish.
   3. Demonstrate the application of each type of trim or decorative finish in a step-by-step sequence.
   4. Demonstrate the use of fusible web and glue stick.
   5. Take the class to the notions department of a fabric store so they can see all the laces, beads, sequins, decorative trims, and pipings available.
   6. Invite a craft or home-sewing professional to show samples of work incorporating trims and decorative finishes.
   7. Visit a sewing center to see how a smocking machine works.

H. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Assignment Sheet

   1. AS 1--Match Terms and Definitions

F. Answers to Assignment Sheet

G. Job Sheets

   1. JS 1--Apply Applique By Hand
   2. JS 2--Apply Applique By Machine
   3. JS 3--Apply Braids
   4. JS 4--Construct and Apply Piping and Cording
   5. JS 5--Apply Decorative Stitches By Hand and By Machine
   6. JS 6--Apply Lace
   7. JS 7--Apply Lettuce Leaf Edging
   8. JS 8--Apply Sequins and Beading
   9. JS 9--Smock Pieces
   10. JS 10--Construct Continuous Bias Strip From a Rectangle
   11. JS 11--Construct Continuous Bias Strip From a Square
   12. JS 12--Construct Tubing

RESOURCES

(NOTE: See Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

APPLYING TRIMS AND FINISHES

UNIT VI

INFORMATION SHEET

I. Terms and definitions

(Objective 1; AS 1)

A. Applique--small piece or pieces of fabric cut into shapes and applied by hand or machine on top of a background fabric for decoration

B. Beading--narrow strip of open-work through which ribbon can be inserted; small beads applied singly or in groups to create a design

C. Beeswax--used to strengthen thread and prevent snarling and snagging

D. Braid--woven, novelty trim finished on both sides

E. Continuous bias--long, bias strip made from a square or rectangle of fabric

F. Cording--twisted cord encased in bias fabric and used to finish and decorate edges

G. Decorative stitches--fancy stitches made by hand or machine to decorate, finish, and/or add design

H. Flat braid--braid available in many widths and colors; used singly or in several rows to create a border effect

I. Fold-over braid--designed for trimming and enclosing raw edges of a garment, such as a neckline or sleeve opening. The top (right) side of a fold-over braid is narrower than the back side.

J. Glovestitch--decorative, topstitching technique done by hand. The stitches are the same size on top and on the underside.

K. Hemming stitch--decorative, open-work stitch made by drawing lengthwise threads of the fabric and fastening the crosswise threads in clusters

L. Horsehair braid--used to stiffen hem edges, especially for evening or bridal wear, so they will flare out softly

M. Lace--fancy flat or ruffled trim used to finish and decorate edges or as a decorative accent

N. Lettuce leaf edging--finish used on stretchy knit or jersey fabrics to achieve a ruffled effect

O. Piping--cord enclosed in bias fabric; similar to cording, except that a smaller cord is used

P. Prickstitch--decorative or functional handstitch used as an edge finish or to apply zippers in tailored garments

Q. Rick rack--zigzag braid available in a large variety of sizes and colors. It can be applied into a seamline or topstitched for trim.

R. Saddle stitch--decorative, topstitching technique done by hand; has longer stitches on top and shorter ones on the underside

S. Sequins--small, shiny, flat circles sewn on to fabric in groups or designs as a decorative accent

T. Smocking--embroidery done on a piece of fabric gathered by hand or machine into small, regular folds

U. Soutache or bias braid--braid trim cut on the bias to make it stretchy; used to form and outline designs on a garment (used in Spanish design garments)

V. Tubing--hollow cylinder of fabric used for button loops and decorative trim

II. Applique

(Objective 2; JS 1, 2)

A. An applique is a decorative design cut from separate pieces of fabric and applied by hand or machine to a background fabric. The applique may be one piece or many pieces in an intricate design.

B. Applique pieces can be purchased or made by cutting out motifs of fabric to create the desired design.

C. For background fabric, select a fabric with some body such as broadcloth, denim, linen, or a linen weave. Some knits can be used, but more care and experience is needed for success.

D. For applique fabric, select a fabric that is compatible with the background fabric both in weight and care. Lightweight fabrics in calico prints, contrasting colors, and gingham are good choices. Try to avoid fabrics that ravel easily.

E. Stabilizer

1. **Fusible web** (Stitch-Witchery®): May be cut exactly like the applique and used between the applique and the background fabric
2. **Fusible interfacing**: Can be applied to the back of the applique piece to stabilize it and prevent edges from ravelling and puckering
3. **Glue stick**: May be used to temporarily hold applique pieces in place while they are being sewn down
4. **Stitch-n-Tear®**: Should be used behind the background fabric to stabilize it and prevent puckering during machine stitching. It is not necessary with hand applique.

F. Patterns for children's wear and household accessories often include appliques. Many commercial patterns for appliques are available in quilt supply and craft stores. Children's coloring books often have designs that can be copied.

III. Braid

(Objective 3; JS 3)

A. Braid is a woven or knitted novelty trim finished on both sides.

1. Many different fabric blends
2. Variety of widths and weights
3. Plain or very elaborate
4. Can be applied by hand or machine

B. Braid can be incorporated into detail areas during the actual construction of a garment or applied when the garment is finished.

1. Always keep the method of application in mind when selecting braid.
2. Do not wait until the garment is finished to discover that, in parts of the garment, the trim should have been inserted in seams during construction.

C. Types of braid vary from simple rick-rack to gold and silver beaded braids.

D. Select braid that is compatible with your fashion fabric and that will produce the desired look.

E. Selecting braid

1. Mark accurately and measure frequently.
2. Pre-shrink braid by dipping in hot water and laying out to dry.
3. Care characteristics of the braid should be the same as those for the fabric.

F. Braid can be applied by hand or machine.

1. Machine application:
    a. Produces a more casual look
    b. Is much faster and is sturdier
2. Hand application:
    a. Recommended on very fine fabrics and on very dressy garments that will be dry cleaned
    b. Allows for more movement and a finer finish
    c. Must be done using tiny, invisible stitches

IV. Piping and cording

(Objective 4; JS 4)

A. Used to add a decorative finish to a garment or product

B. Usually used around necklines, waistlines, armholes, or hemline of a garment before the facing is applied

C. Piping

1. Is a narrow bias strip of fabric, ribbon, or braid with or without filler inside

    2. Can be purchased in many colors
    3. Used to accent and decorate garments
    4. Has a 1/4" seam allowance that is inserted into the seam of a garment

  D. Cording

    1. Is much heavier and thicker than piping
    2. Usually used more in covering cushions on couches and chairs
    3. Is made from a cord enclosed in a bias strip of fabric sewn together with a zipper foot
    4. Comes in many widths, so it must be measured around before the bias strip is cut

V. Decorative stitches by hand and by machine

(Objectives 5, 6; JS 5)

  A. There are many different types of decorative stitches.

  B. Decorative stitches add interest and creativity to a garment or other product.

  C. Many sewing machines have a wide variety of decorative stitches built in. Additional variations can be made by:

    1. Changing the stitch length and width
    2. Using a double needle or two threads through the needle
    3. Using a novelty thread (e.g., variegated embroidery floss)

  D. Decorative stitches

    1. Topstitching
        a. Probably the most common decorative stitch
        b. Can be made special by using two threads through the needle or a double needle
    2. Channel stitching
        a. Use several rows of stitching at 6-8 stitches per inch.
        b. Channel stitching is elegant on wool or wool-like fabric over polyester fleece.
    3. For double topstitching, press seam open and topstitch an equal distance from both sides of the seam.
    4. Saddle stitch
        a. Done by hand
        b. Short stitches taken through the garment and facing at a given distance from the edge
        c. Longer outside stitches than underside stitches
    5. Glovestitch
        a. Done by hand
        b. Same size stitches, whether top or underside
    6. Prickstitch
        a. Done by hand
        b. Used for putting zippers in tailored garments
        c. A backstitch that is smaller on top and longer on the underside
    7. Hemming stitch
        a. This type must be done on the true grainlines.
        b. Threads are drawn out of the fabric, grouped together, and stitched in a pattern.

8. Fagoting
    a. A decorative open-work stitch
    b. Used to create an openwork pattern between two edges
    c. Made with buttonhole twist or heavy embroidery floss

VI. Applying lace

(Objective 7; JS 6)

A. Lace adds a delicate touch to blouses, women's evening dresses, children's dresses, baby clothes, lingerie, and household linens.

B. Many types of beautiful lace trims can be purchased in a variety of widths and colors, in both flat and pre-gathered styles.

C. Lace is also used as a hem binding and can be bought in many colors to finish hemlines of dresses, shirts, and other items.

D. Lace can be applied to the edge of the fabric or set into the fabric.

E. Lace edgings and insertions of cotton, silk, linen, rayon, and other fibers are available in a variety of widths, patterns, and types.

F. The delicate network of threads in lace requires special sewing techniques.

1. Deciding whether to stitch on the lace on by machine or by hand depends upon:
    a. The openness of the lace
    b. The fiber content
    c. The wear position of the lace on the garment
    d. Personal preference
2. When sewing on lace by hand, use a fine, short stitch with a fine, short needle.
3. When applying lace trim by machine, use a hemmer foot or tape presser foot (keeps toes from catching in lace).
4. Flat lace can be sewn on top of a finished garment with a regular or decorative stitch, or it can be included in a seam.
5. Gathered lace is usually sewn into a seam.

G. Lace can be purchased pre-gathered or you can gather your own.

1. Pre-gathered lace has a 1/4" binding at the top which should be hidden within a seam.
2. To gather your own, buy 2-1/2 to 3 times the finished length, depending on fullness desired.
3. Gather the lace by machine using a long stitch or by hand.
4. Pull gathering thread and distribute fullness evenly throughout area where lace is to be applied.

VII. Apply lettuce leaf edging

(Objective 8; JS 7)

A. Lettuce leaf edging gives a very delicate, ruffled look to stretchy knits, tricots, and jerseys.

B. This finish makes a nice ruffled edge around the bottom of nightgowns, tea-length formals, and bell sleeves.

C. It also can be used on the edge of ribbing around T-shirts.

(NOTE: Cut ribbing half the regular width, lettuce leaf one edge, and then apply to the garment.)

D. The more the fabric will stretch, the more ruffles there will be. However, care must be used because these fabrics will run.

VIII. Sequins and beading

(Objective 9; JS 8)

A. Used to add glamour to evening dresses, sweaters, blouses, scarves, and evening bags

B. Sewn on by hand after the garment is finished

1. Use beeswax on the thread to eliminate knotting.
2. Sew with a backstitch, working from right to left and pulling thread tight.

C. May be used individually or in a design

D. Sequin held in place by a small bead in the center of a sequin, which acts as an anchor

IX. Smocking

(Objective 10; JS 9)

A. Smocking is an old art which has regained popularity.

1. Pleats were traditionally sewn into the bodice and cuffs of garments, creating an elastic area that fit closely but allowed for movement.
2. Adds interest and originality to a garment
3. Is now used mainly on children's clothing, blouses, and lingerie

B. The smocked section is always made before the garment is constructed.

1. The decorative stitching is done by hand using silk or embroidery floss.
2. Thread can match, contrast, or create a design.
3. A variety of stitches are used to create interesting effects.
4. Fabric should be 2-1/2 to 3 times wider than the finished area.
5. Any smooth, even-textured light- or medium-weight fabric can be used.

C. The English (traditional) method

1. Small, even pleats are first basted into the fabric.
2. Decorative stitching is done on the pleated fabric.
3. Pleating machines may be used to quickly prepare the fabric.

D. The American method

1. Fabric is first marked with evenly placed dots but is not gathered.
2. Smocking stitches are worked directly onto the fabric, decorating and gathering all in one step.
3. A small-checked gingham fabric can be used instead of marking plain fabric with dots.

E. Patterns for smocked garments are available in commercial pattern books and from craft and specialty stores.

X. Bias binding

(Objective 11; JS 10, 11)

A. Bias binding is used to enclose a raw edge.

1. It can be used in dressmaking, around armholes, necklines, and hems.
2. It can be used on household items, around place mats, quilts, bedspreads, and other curved edges.

B. Bias binding is also used to cover a cord for piping or cording.

C. Bias binding may be purchased in a variety of widths and colors.

D. These bindings may be made from self fabric or contrasting fabric.

1. Self-constructed binding is more economical when large amounts are needed.
2. Binding constructed from self fabric will have the same care qualities as the main fabric.
3. Binding constructed from a fabric used in the item may create an outside edge that either contrasts or blends.

E. Contrasting bindings may be decorative as well as functional.

XI. Construct tubing

(Objective 12; JS 12)

A. Tubing is made from a bias-cut piece of fabric with a cord enclosed.

B. It is used as a functional and decorative finish to ladies' garments.

C. Button loops are made with narrow tubing and work especially well with ball and half-ball buttons at necklines, on sleeves, and on jacket fronts.

D. Frogs are used as jacket closures. They are made by forming a design with the tubing and sewing it in place. The ends of the loops hook together or fasten over a button.

E. Tubing is also used on formals and as belts and bows for decoration on dressy garments.

APPLYING TRIMS AND FINISHES

UNIT VI

ASSIGNMENT SHEET 1--MATCH TERMS AND DEFINITIONS

Directions: Match each term with its definition by writing the letter in the space provided.

a. Applique
b. Beading
c. Beeswax
d. Continuous bias
e. Cording
f. Lace
g. Lettuce leaf edging
h. Smocking
i. Topstitching
j. Tubing

___ 1. Fancy flat or ruffled trim used to finish or decorate an edge

___ 2. Prevents threads from knotting and snagging; strengthens thread

___ 3. Cut from a square or rectangular piece of fabric but stitched and cut into a bias strip

___ 4. Decorative trim done on a piece of fabric by hand or machine using thread and small folds of fabric

___ 5. Hollow cylinder of fabric used for button loops, frogs, etc.

___ 6. Small cylinders applied singularly or in groups to form a design

___ 7. Ruffling effect achieved by stretching jerseys and stretchy knits

___ 8. Encased in a bias piece of fabric and used to finish or decorate an edge

___ 9. Small piece(s) of fabric applied to a garment for decoration

___ 10. Row of stitches done on the outside of a garment to finish the outside edges

APPLYING TRIMS AND FINISHES

UNIT VI

ANSWERS TO ASSIGNMENT SHEET

ASSIGNMENT SHEET 1

1. f
2. c
3. d
4. h
5. j
6. b
7. g
8. e
9. a
10. i

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 1--APPLY APPLIQUE BY HAND

Materials and equipment:

Fabric for background (prewashed)
Fabric(s) for applique (prewashed)
Fabric marker or pencil
Applique pattern
Basic sewing supplies

Steps of procedure:

1. Trace or transfer design to right side of applique fabric.

2. Cut out applique, leaving a 1/4" seam allowance.

3. Turn under seam allowance and baste.

4. Pin applique piece(s) to background. Use glue stick to hold, if desired.

5. Thread needle with thread that matches the applique fabric and blindstitch onto background fabric.

6. Press. Remove basting threads.

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 2--APPLY APPLIQUE BY MACHINE

Materials and equipment:

Fabric for background (prewashed)
Fabric(s) for applique (prewashed)
Applique pattern
Fusible interfacing
Fusible web and/or glue stick
Stitch-N-Tear® (or paper)
Basic sewing supplies

Steps of procedure:

1. Trace design onto fusible interfacing, sticky side up.

2. Fuse interfacing to wrong side of applique fabric.

3. Cut out applique on traced lines.

4. Place applique on background fabric. Hold in place with fusible web or glue stick.

5. Cut a piece of Stitch-N-Tear® (or paper) slightly larger than entire applique and place it behind the background fabric.

6. Adjust sewing machine for a very narrow zigzag stitch. Test on scrap fabric.

7. Zigzag around edges of applique piece. Stitches should just clear the edge of the applique to hit the background fabric. Thread should match the applique piece.

   (NOTE: Do not stitch over edges that will be covered by another applique piece.)

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 3--APPLY BRAIDS

Materials and equipment:

Fabric or garment construction pieces
Braid
Basic sewing supplies

Steps of procedure:

Flat braid

1. Cut braid to desired length plus 1" to catch in seams or to turn under.

2. Pin or baste to the garment.

3. Sew by machine or by hand.

4. Trim ends even with seam allowance or turn under 1/4" and tack.

   (NOTE: Flat braid can be used in several rows as on a sailor collar. **Do not** pull braid or stretch it as you sew; this will cause puckering.)

Soutache or narrow bias braid

1. Transfer design to garment with marking pencil, chalk, or basting thread.

2. Pin or baste bias braid in place.

3. Ease around corners, being careful not to stretch braid.

4. Sew by hand using small invisible stitches or baste in place and then sew by machine using a zipper foot.

Fold-over braid (machine application)

1. Pin braid over the finished edge, shape it to conform to curved areas, or miter square corners.

2. Topstitch on edge from the front side.

3. Sew together by hand across area where braid meets; tack mitered corners.

4. Press lightly.

Fold-over braid (hand application)

1. Pin braid over finished edge; shape it to conform to curved areas.

2. Baste in place.

3. Slipstitch front side of braid to garment invisibly.

4. Slipstitch back of braid to garment or topstitch with a zipper foot from the right side close to the braid.

   (NOTE: Fold-over braids are usually of woven bias construction. Braid is pre-folded and the top edge is slightly narrower than the back edge so the back can be caught easily in the stitching.)

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 4--CONSTRUCT AND APPLY PIPING AND CORDING

Materials and equipment:

Fabric
Piping or cording
Basic sewing supplies

Steps of procedure:

To cover cording or piping:

1. Cut bias strip of fabric the width of the cord plus 1". (See Job Sheet 10 or 11--Construct Continuous Bias.)

2. Put bias strip around cording, matching raw edges.

3. Sew close to cording with a zipper foot and 8 to 10 stitches per inch.

To apply piping and cording:

1. Place stitched line on covered cording on right side of garment along seamline with raw edges of bias fabric in seam allowance.

2. Sew cording to garment using a zipper foot.

3. Put facing to garment right sides together over cording, matching seam allowances.

4. Stitch again with zipper foot; use first row of stitching as a guide.

5. Press seam allowances; grade seams if bulky.

6. Press seam to inside, then toward facing, and understitch.

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 5--APPLY DECORATIVE STITCHES BY HAND AND BY MACHINE

(NOTE: On a piece of fabric of your own or one supplied by the teacher, practice decorative machine stitches. Experiment by changing stitch widths, stitch lengths, and by using contrasting thread. Use sewing machine manual for reference.)

Materials and equipment:

Sewing machine
Manual
Fabric
Buttonhole twist or topstitching thread
Basic sewing supplies

Steps of procedure:

Decorative machine stitches

1. Select a decorative stitch and set machine as directed by the manual.
2. Run sewing machine, making a row of decorative stitches.
3. Change the length and/or width setting and make another row of stitches.
4. Repeat steps 1, 2, and 3 for several different decorative stitches.

Handstitches

1. Make saddle stitch.
    a. Thread sewing needle with a double-thread of buttonhole twist or topstitching thread.
    b. Knot ends of thread and hide knot on inside of garment.
    c. Take small running stitches evenly spaced every 1/4" to 1/2" apart, depending on weight of fabric; stitches on top are longer than stitches on the underside.
    d. Knot off threads.
2. Do glovestitching.
    a. Thread sewing needle with a double-thread of buttonhole twist or topstitching thread.
    b. Knot ends of thread and hide knot on inside of garment.
    c. Take short stitches, making stitches exactly the same length on the top side and under side.

    d. Glovestitch entire garment.

    e. Knot off thread.

3. Prickstitch.

    a. Thread needle with sewing thread.

    b. Knot thread and hide knot on inside of seam.

    c. Bring needle and thread to top side of fabric, then take a short half backstitch, picking up 2 to 3 threads of fabric.

    d. Insert needle behind where needle previously had come up; pull each stitch tight.

    e. Knot off thread.

(NOTE: This can be used as a decorative stitch, for inserting zippers, and in tailored garments instead of understitching to prevent facing from rolling.)

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 6--APPLY LACE

Materials and equipment:

Fabric
Lace
Basic sewing supplies

Steps of Procedure:

Flat lace with both edges finished (outside of garment)

1. Cut lace the desired length for area to be covered.

2. Pin or baste in place.

3. Stitch on each side with 8 to 10 stitches per inch or with a narrow zigzag stitch.

   (NOTE: To apply by hand, slipstitch to garment.)

Lace insertion

1. Baste lace in place as with flat lace.

2. Cut through fabric halfway between basting lines.

3. Trim seam to 1/4" and overcast raw edges.

4. Press fabric toward lace and topstitch from right side through lace and fabric.

Gathered lace (in seamline)

1. Baste gathering line of lace to right side of garment on seamline.

2. Apply facing and stitch along previous stitching line.

3. Trim and grade seam.

4. Understitch facing to seam allowance to prevent rolling.

5. Press.

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 7--APPLY LETTUCE LEAF EDGING

Materials and equipment:

Jersey knit fabric
Basic sewing supplies

Steps of Procedure:

1. Set machine for a medium width zigzag and a short stitch length.

2. Trim hem depth to 3/8" and press to the wrong side.

3. With wrong side up, hold fabric with both hands and stretch; zigzag along folded edge.

4. Trim excess fabric from hem.

   (NOTE: Be sure to make a sample before stitching on garment. Width and length of zigzag will depend on the stretch qualities of the fabric.)

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 8--APPLY SEQUINS AND BEADING

Materials and equipment:

Fabric
Beeswax
Marking chalk
Sequins
Beads
Basic sewing supplies

Steps of Procedure:

Single beads

1. Make outline of design on the outside of the fabric with chalk.
2. Baste design on fabric.
3. Thread a fine needle with thread that matches the fabric.
4. Knot thread on inside of fabric and pull needle through to top side.
5. Pass the needle through the bead. Take a backstitch down through fabric. Bring the needle up exactly a bead's length from the first stitch.
6. Draw thread tightly enough that the bead lays flat against the fabric.
7. Repeat steps 5 and 6 until desired number of beads are applied.
8. Fasten threads on inside with several small backstitches or a small knot.

String of beads

1. String beads on a heavy thread leaving 4" to 6" of thread on each end.
2. Lay beads along design line and pin in place.
3. Bring needle through and make a small whip stitch between every bead.
4. Draw threads tight enough to support beads, but not too tight.
5. Fasten threads on inside with small backstitches or a knot.

Sequins sewn singly

1. Fasten thread on inside of fabric.

2. Bring needle up through center of sequin and bead and back down through center of sequin only.

3. Fasten thread securely in the fabric by small backstitches.

Sequins in a row

1. Fasten thread on inside of fabric.

2. Working from right to left, bring needle up through fabric and center of the sequin.

3. Take a backstitch in the fabric under the sequin and draw up thread until sequin is flat against the fabric.

4. Repeat Step 3 until design is finished.

5. Fasten thread securely in the fabric with small backstitches.

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 9--SMOCK PIECES

Materials and equipment:

Lightweight cotton fabric (about 5" x 18")
Hard lead pencil or washout marking pen (test)
Embroidery thread and needles
Contrasting color, cotton thread (for basting)
Basic sewing supplies

Steps of Procedure:

1. Mark dots at 3/8" or 1/2" intervals in a grid on the right side of the fabric or use an iron-on transfer from a commercial pattern. ***(See Fig. 6-1.)***

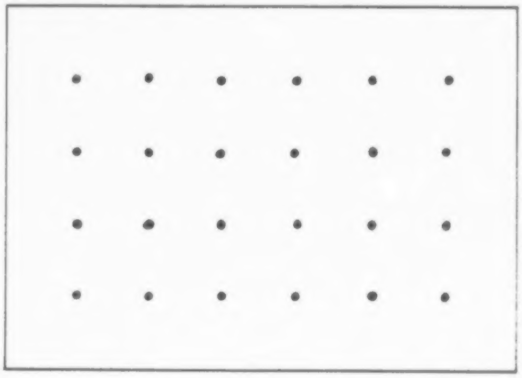


FIG. 6-1

2. From the front, starting at one end of row, take small stitches under the dots. Leave thread loose at the end of the row. ***(See Fig. 6-2.)***

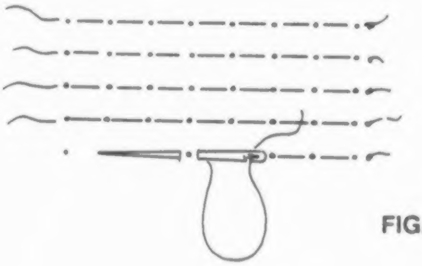


FIG. 6-2

3. Draw up threads, two at a time, to gather until fabric is a little less than 4" wide. Tie off ends of threads and arrange pleats so they are evenly spaced across threads. (Dots will appear at the top of the folds to indicate the smocking points.)

4. Thread the needle with embroidery floss.

5. Using the dots as placement guides, smock across with the wave stitch.

   a. Start at the left. Stitch under the dot from right to left ***(See Fig. 6-3.)***

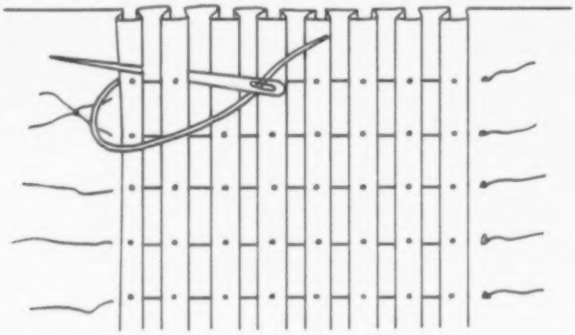


FIG. 6-3

   b. Move down and to the right and stitch under that dot from right to left ***(See Fig. 6-4.)***

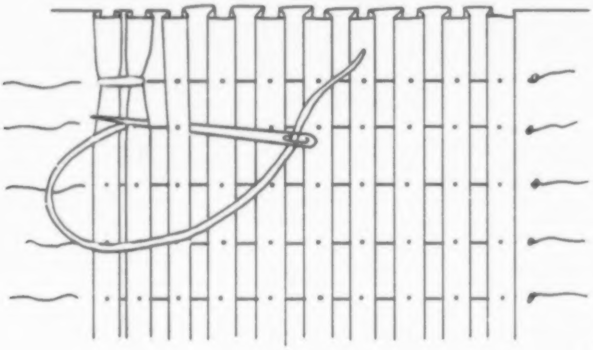


FIG. 6-4

6. Repeat until you have taken five stitches down and to the right. Then take four stitches up and to the right. ***(See Fig. 6-5.)***

7. Continue this pattern across the fabric.

8. Again beginning at the left, make additional rows of stitching below the first one. (If you wish, try another stitch from a book or pattern.)

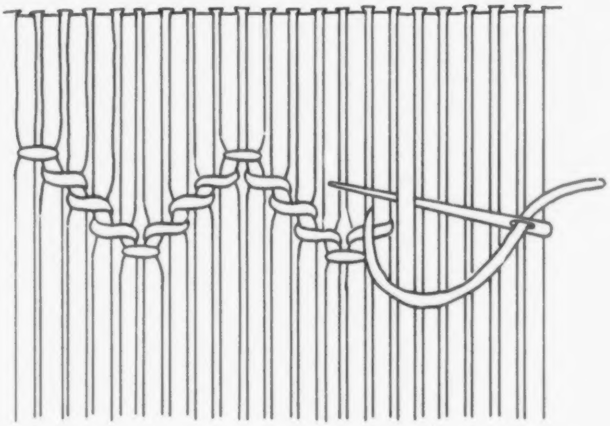


FIG. 6-5

9. When smocking is finished, remove all gathering threads.

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 10--CONSTRUCT CONTINUOUS BIAS STRIP FROM A RECTANGLE

Materials and equipment:

Fabric
Fabric marker
Ruler
Basic sewing supplies

Steps of Procedure:

1. Cut a rectangle of fabric on the lengthwise and crosswise grains of the fabric.

2. Fold the fabric down diagonally until the upper left corner is on the bottom edge.

3. Fold the fabric up diagonally until the lower right corner is on the upper edge.

4. Cut along both diagonal folds and discard cut off corners. ***(See Fig. 6-6.)***

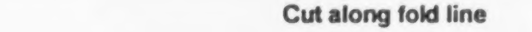


FIG. 6-6

5. Using a safe fabric marker, draw parallel lines on the wrong side of the fabric along the bias (the long way). The distance between the lines will be the finished width of the bias strip.

6. Join the short ends of the fabric, right sides together, with one edge extending beyond the other the distance between two lines. Allowing for a 1/4" seam allowance, the rest of the lines should appear to continue across the seam. ***(See Fig. 6-7.)***

7. Sew seam with a 1/4" seam allowance. Press seam to one side.

8. Hang tube over your arm and cut along with lines starting at one side. Bias will come off in a long, continuous strip. ***(See Fig. 6-7.)***

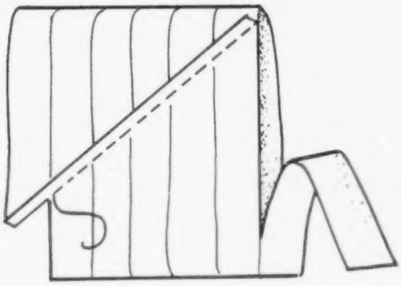


FIG. 6-7

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 11--CONSTRUCT CONTINUOUS BIAS STRIP FROM A SQUARE

Materials and equipment:

Fabric
Fabric marker
Ruler
Basic sewing supplies

Steps of Procedure:

1. Cut a square of fabric on the lengthwise and crosswise grains.

2. Fold the fabric in half diagonally.

3. Cut along the diagonal fold.

4. With right sides together, cross the two pieces over each other with two of the original straight sides lined up. *(See Fig. 6-8.)*

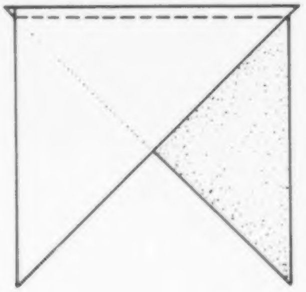


FIG. 6-8

5. Open fabric and press seam allowance in one direction.

6. Using a safe fabric marker, draw parallel lines on the wrong side of the fabric along the bias (the long way). The distance between the lines will be the finished width of the bias strip. Open fabric and press seam allowance in one direction. *(See Fig. 6-9.)*

7. Join the short ends of the fabric, right sides together, with one edge extending beyond the other the distance between the two lines. Allowing for a 1/4" seam allowance, the rest of the lines should appear to continue across the seam. *(See Fig. 6-10.)*

8. Sew seam with a 1/4" seam allowance. Press seam to one side.

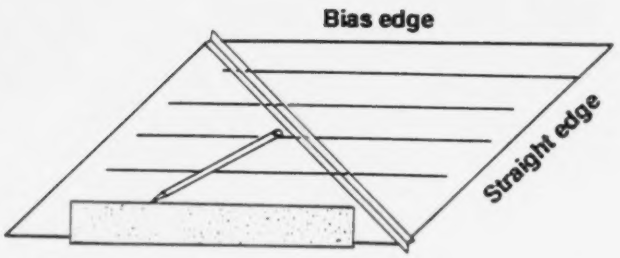

Bias edge
Straight edge

FIG. 6-9

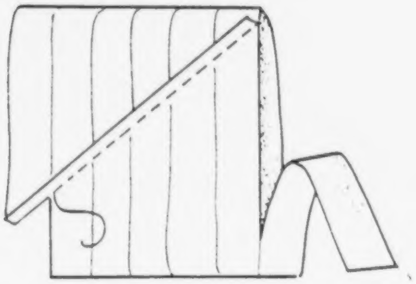


FIG. 6-10

9. Hold tube over your hand and cut along with lines starting at one side. Bias will come off in a long, continuous strip.

APPLYING TRIMS AND FINISHES

UNIT VI

JOB SHEET 12--CONSTRUCT TUBING

Materials and equipment:

Fabric
Cording
Loop turner
Basic sewing supplies

(NOTE: For an interesting and decorative belt, make three tubes, turn, and then braid them together. Braid only the waist measurement and leave the ends hanging free. Sew the ends of the braided section together at each end to keep them from unbraiding.)

Steps of Procedure:

Corded tubing

1. Cut a strip of bias fabric wide enough to go around the cording, plus 1-1/4" for seam allowance.
2. Cut cording twice as long as the bias strip of fabric plus 1".
3. Put cording on the wrong side of the bias strip and stitch tight, leaving 1" extending out.
4. Fold bias strip over the cording, right sides together, with raw edges matching.
5. Stitch close to the cording with zipper foot, stretching fabric slightly.
6. Trim seam allowance to approximately 1/8" seam.
7. Turn bias by pulling the fabric right side out over the cording.

Bias tubing

1. Cut strip of bias fabric the desired width of the tubing plus 1-1/4" for seam allowance.
2. Matching raw edges, fold strip with right sides together.
3. Stitch the length of the tubing, keeping the tubing the same width and stretching as you sew. (Stretching will prevent popping of stitches when you turn the tubing.)
4. Trim the seam allowance to 1/8" from stitching line.
5. Turn the bias by slipping the bias tube into a loop turner. (If a loop turner is not available, place heavy thread inside the fold, stitch across the end of tube, and thread. Pull the thread to turn the tubing.)

(NOTE: Double stitching helps here. Stitch one side, flip fabric over, and stitch again, stretching as before. This will serve as an anchor so top and bobbin threads will not break at the same time.)

Custom Sewing

Windows and Beds
Unit VII

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1					1-11, 26	
-	2	1			1	18, 20, 23	
-	3		1			15, 17, 19, 25	
B4	4	2			2	12-13, 16, 22, 24	
B5	5	3			3		
B5	6	3			4	27	
F40	7				5		
F41	8				6, 7	14, 21	

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

WINDOWS AND BEDS

UNIT VII

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to accomplish all the steps necessary to construct draperies and bedspreads. Competencies will be demonstrated by correctly performing the procedures outlined in the Job Sheets and by scoring at least 85 percent on the Unit Test.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Based on the content outline, MATCH TERMS ASSOCIATED WITH MEASURING WINDOWS AND BEDS TO THE CORRECT DEFINITIONS by achieving 100 percent accuracy on the Unit Test.

2. Based on the content outline and Transparency Master 1, IDENTIFY WINDOW TREATMENTS AND BED COVERINGS by completing Job Sheet 1 and by achieving 100 percent accuracy on the Unit Test.

3. Based on the content outline and Handout 1, SELECT FABRIC FOR WINDOW TREATMENTS AND BED COVERINGS by achieving 100 percent accuracy on the Unit Test.

4. Based on the content outline and Transparency Master 2, MEASURE WINDOWS FOR DRAPERY CONSTRUCTION by completing Job Sheet 2 and by achieving 100 percent accuracy on the Unit Test.

5. Based on the content outline and Transparency Master 3, MEASURE BEDS FOR BEDSPREAD CONSTRUCTION by completing Job Sheet 3.

6. Based on the content outline and Transparency Master 3, MEASURE BED FOR DUST RUFFLE CONSTRUCTION by completing Job Sheet 4 and by achieving 100 percent accuracy on the Unit Test.

7. Based on the content outline, CONSTRUCT A WINDOW TREATMENT by completing Job Sheet 5.

8. Based on the content outline, CONSTRUCT A COVERLET AND DUST RUFFLE by completing Job Sheets 6 and 7 and by achieving 100 percent accuracy on the Unit Test.

WINDOWS AND BEDS

UNIT VII

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Make transparencies.

C. Provide students with Objective Sheet.

D. Discuss Unit and Specific Objectives.

E. Provide students with Information Sheet.

F. Discuss the Information Sheet.

(NOTE: Use transparencies to enhance the information as needed.)

G. Provide students with Handout and/or Job Sheets prior to the demonstration of the procedures. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

H. Integrate the following activities throughout the teaching of this unit:

   1. Introduce the unit by explaining the terminology provided on the Information Sheet.
   2. Plan a field trip to an interior decorator to see window treatments.
   3. Ask a professional to speak to the class about curtain, drapery, and bedspread construction. Demonstrate measurement and construction techniques.
   4. Provide students with samples of appropriate fabrics and linings.
   5. For JS 2, if students do not have a real situation in mind, use a window in the classroom and choose a type of window treatment for this activity.

I. Give test.

J. Evaluate test.

K. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Transparency Masters

1. TM 1--Window Treatments
2. TM 2--Parts of a Window
3. TM 3--Measuring a Bed

F. Handout

1. HO 1--Conversion Chart for Using Sheets

G. Job Sheets

1. JS 1--Explore Window Treatments
2. JS 2--Measure Window for Drapery Construction
3. JS 3--Measure Bed for Bedspread Construction
4. JS 4--Measure Bed for Dust Ruffle Construction
5. JS 5--Construct a Panel Curtain or Unlined Drape
6. JS 6--Construct a Tailored Bedspread
7. JS 7--Construct a Dust Ruffle

H. Unit Test

I. Answers to Unit Test

RESOURCES

(NOTE: Also see Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

A. Books

1. Butterick. Vogue Sewing. New York: Harper & Row, 1982.

2. Singer Sewing Reference Library. Cy DeCosse Incorporated, 5900 Green Oak Drive, Minnetonka, MN 55343 (800/328-0590, ext. 725; 612/936-4700).

   Sewing for the Home, 1986.
   More Sewing for the Home, 1987.

3. Sunset Books, ed. Curtains, Draperies, and Shades. Menlo Park, CA: Lane, 1981.

WINDOWS AND BEDS

UNIT VII

INFORMATION SHEET

I. Terms and definitions

(Objective 1)

A. Apron--trim below the window sill

B. Baseboard--molding that extends up the wall from the floor

C. Batting--sheet of (usually) polyester filling placed between the face and backing of quilts and some coverlets. Batting must be quilted or tied in place to keep it from bunching with wear and washing. Batting may also be made from wool, cotton, silk, or a combination of fibers.

D. Cafe curtain--tiered curtain which can be shirred onto rods or made with pleated tops. It may be used in combination with a valance or decorator shade.

E. Casing--tunnel at the top of a curtain; open at both ends so a curtain rod or pole can be inserted; also known as a rod pocket

F. Cording--piece of cord covered with bias fabric and inserted between seams (see Unit VI--Trims and Finishes)

G. Coverlet--spread, similar to a bedspread, which covers the top of the bed and extends only a little way down the mattress

H. Curtain--window treatment, usually fabric shirred onto a rod, often with a heading

I. Drapery--window treatment using a stiffening at the top, pleats, and special pins to attach to a drapery rod

J. Drop--distance from the top of the mattress down the side to the edge of the coverlet or bedspread

K. Dust ruffle--bed covering of fabric, either gathered or pleated, which extends from the box springs to the floor

L. Face--top fabric of a quilt or coverlet

M. Frame--all the (usually wooden) trim around the window

N. Heading--decorative ruffle above the casing along the upper edge of a curtain

O. Motif--print or design on the fabric

P. Overlap--amount of fabric required to cover the center of a drapery rod where one drapery lies under the other when closed

Q. Panel or length--yardage or amount of fabric, in full widths, required for the complete **length** of the project

R. Repeat--amount of fabric required to match exactly the motifs in a fabric when panels are placed side by side

S. Return--distance between the wall and the front of the curtain or drapery rod

T. Ruffling--edging which gives a graceful appearance and adds weight to curtains to make them hang and drape more attractively

U. Sash--part of the window that includes the glass and its frame

V. Sill--extended part of a window at the bottom of a window sash; similar to a shelf

W. Valance--separate ruffle at the top of the window or over a curtain

II. Techniques to use when deciding on window treatments and bed coverings

(Objective 2; TM 1; JS 1)

A. Thoroughly discuss with the customer the desired effect and the overall room effect of the type of window treatments in mind.

1. Window treatments should allow for light and ventilation control, if desired.
2. Window treatments must not interfere with heating and cooling devices in the floors and walls.
3. Window treatments should allow for privacy, if desired.
4. Some window treatments may be damaged by sunlight.
5. Window treatments should enhance the overall look of the room and blend with furnishings.
6. Bed coverings should be chosen after determining whether the bed might be used for lounging.
7. Bed coverings which are also to be used as coverlets or blankets require different considerations than those used for decoration only.

B. Ask for samples or swatches of fabric to be used before you begin measurements so you can determine any special treatments required.

1. A fabric which is to be machine washed may require different finishes than one which is to be dry cleaned.
2. A shrink pleat or extra wide hem may help correct shrinkage problems after the product has been cleaned or laundered.

III. Hints and considerations for fabric selection

(Objective 3; HO 1)

A. Natural fibers are durable and are good insulators.

B. Man-made fibers are easy-care and are well-suited to home-sewing projects.

C. Combinations of natural and man-made fibers utilize the good qualities of both.

D. A fabric finish improves appearance and can make fabrics more lustrous, stable, crease-resistant, mildew-resistant, and resistant to oil- and water-borne stains.

E. Sheer or lightweight fabrics usually require a lining.

F. Special linings are available to reduce fading and wear from sunlight.

G. A fabric with a motif that requires matching will require more fabric than an overall pattern or solid color.

H. Colors

1. Consider the colors already in the room, including the carpeting and any wood tones.
2. Consider the mood of colors; pastels, neutrals, and paler shades of blue and green are soothing. Bright shades and warmer colors of red and yellow are stimulating. Dark colors create a cozy feeling.
3. Pale colors diffuse light; dark colors block it.
4. Warm colors add warmth to a cool area; cool colors can cool a hot, sunny area.

I. Sheeting in decorator colors is an inexpensive way to decorate both windows and beds. See **Handout 1** for yardage.

J. Most drapery fabric comes in 45", 48", or 54" widths. Some sheer fabrics are available as wide as 118". Drapery lining generally comes 45" wide, although some lining is wider.

IV. To figure yardage, use the following formula.

(NOTE: It is generally a good idea to buy 1/4 to 1/2 yard extra to allow for straightening, sample pressing, and stitching.)

A. Multiply the finished width times the fullness desired. Add the width of the side hem allowances to get the total width.

B. Divide the total width by the width of the fabric to get the number of fabric widths. (Round off, if necessary.)

C. Add the finished length, plus the bottom hem allowance, plus the heading allowance, plus 1" for the cut length.

D. Multiply the number of fabric widths (B) by the number of inches in the cut length (C) for the total number of inches.

E. Divide the total number of inches by 36 to get the number of yards of fabric needed. (Add an extra 1/4 to 1/2 yard for insurance.)

V. How to measure windows

(Objective 4; TM 2; JS 2)

A. Measure the length of the window. Record the following:

1. Top of window frame to each part of the window
2. Ceiling to top of frame
3. Ceiling to floor and to baseboard

B. Measure the width of the window from side to side.

C. Measure the return, if any.

D. Measure the overlap, if any.

E. Measure from one end of the drapery rod to the other.

F. Measure the length and width of the valance or other additional treatment.

G. Measure from the top of the curtain or drapery rod to the place on the window or wall where it will end.

H. Add 2" for heading, if there will be one.

I. Add 4" for top hem (for a 1" heading and a 1" casing) and 6" for bottom hem. Hems on curtains and drapes look and hang better when they are doubled. This is the length of fabric needed for each panel.

J. For adequate fullness, multiply the finished width measurement by 2 or 2-1/2. If fabric is sheer or lightweight, multiply the finished width by 3.

K. Add 12" for side hems (3" on each side of two panels). This is the width of fabric needed for each panel.

L. Use the width of your fabric to determine how many widths of fabric will be needed for each panel. For example, if your fabric is 45" wide and you figured each panel at 110", you will need 2-1/2 widths of fabric for each panel.

(NOTE: Splitting a width of fabric vertically will allow you to come very close to your measured width. It is also possible to add an additional half width of fabric to each side [for a total of three widths each] or eliminate a half width [for a total of two widths each]. Consult with the client before altering the plan this much.)

(NOTE: When a half width is used, the half width should be placed to the outside of the drape or curtain.)

VI. How to measure beds for bed coverings

(Objective 5; TM 3; JS 3)

A. Measure the length from top edge (head) of the mattress to the foot edge.

B. Measure the width from the side of the mattress to the other side.

C. Measure the drop.

   1. For a coverlet, measure from the top of the mattress to the bottom edge of the mattress and add 3".
   2. For a full length spread, measure from the top of the mattress to the floor, minus 1".

D. Add 2" in both directions for hems.

E. Divide the total width measurement by the width of the fabric to determine the number of widths needed (round up as necessary).

F. Multiply the number of widths by the total length measurement to determine the number of total inches of fabric needed.

G. Divide by 36 to determine the number of yards needed. Add 1/4 to 1/2 yard to allow for straightening fabric and test pieces.

H. Add extra for cording or binding, as desired.

I. If lining is desired, measurements should be the same.

VII. How to measure for a dust ruffle

(Objective 6; TM 3; JS 4)

A. Measure the length of the box springs from head to foot of bed.

B. Measure the width of the box springs from side to side.

C. Measure from the top of the box spring to the floor and subtract 1". This is the finished width of the dust ruffle.

D. Add together the length measurement times 2 and the width measurement times 2 to determine the total length of the finished dust ruffle.

(NOTE: Some dust ruffles cover only three sides of the bed and the fourth side is placed against the wall. For this style, add only the three sides to determine the finished length.)

E. For fullness, multiply the total length by 2 or 2-1/2 (depending on the type of fabric and look desired).

F. For each side, add 2" for hem. The total is the **length** of fabric needed (in inches). Divide by 36 for number of yards needed.

G. Add 2" to the measured width of the dust ruffle for hems. This is the **width** of fabric needed.

H. In most cases you will need to purchase the full length of fabric (as figured in F above). However, if the fabric you are using is twice as wide as the width plus hems, you can split it lengthwise. You will then need only half as much fabric. (Where it is very close, consult with the customer. Sometimes a smaller hem may be used or the dust ruffle can come up off the floor another inch.)

VIII. Procedure for constructing a panel curtain or unlined drape

(Objective 7; JS 5)

A. Straighten fabric by pulling a thread or by using a T-square or see-through ruler with perpendicular lines.

B. Cut fabric into appropriate lengths according to measurements.

C. If a split panel is needed, cut it by folding one length vertically and pinning the selvages together. Apply pressure along the fold and cut with scissors.

D. Sew panels together using a flat-fell seam, a French seam, or a false French seam. (See Unit IV--Construction Techniques.) Put half widths to the outside of each panel.

E. Make lower hem.

1. Turn up 3", wrong sides together, and press.
2. Fold over another 3" and press again.
3. Blindstitch by hand or straight stitch by machine close to edge of first fold. Press.

F. Make side hems.

1. Turn 1-1/2" of fabric over, wrong sides together, and press.
2. Fold over another 1-1/2" and press again.
3. Blindstitch by hand or straight stitch by machine close to edge of first fold. Press. *(See Fig. 7-1.)*

G. Mark finished length. On right side of fabric, measure from lower edge up the distance of the finished length and mark with pins at about 4" intervals across panel.

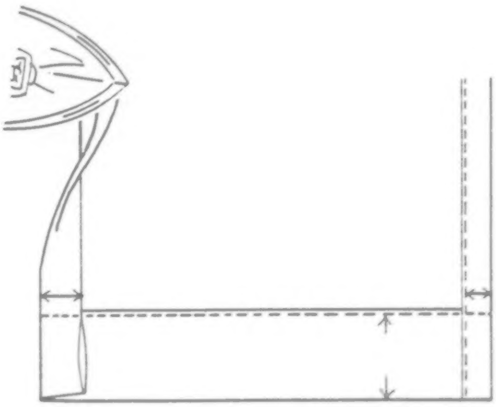


FIG. 7-1

H. Make 1" rod casing and 1" heading.
The upper tube is the heading. The lower tube is the rod casing.

1. Measure 6" above pin-marked line and trim away any excess.
2. On outside, mark 2" and 4" down from top, using pins or fabric marker.

3. Fold cut edge of fabric, wrong sides together, along marked line 2" from top. Remove any pins. Press.
4. Fold again along marked line 4" from top. Remove any pins. Press. You now have a 2" heading with 2" turned under.
5. Stitch close to first fold. Press.
6. With fabric marker, draw a line 1" down from top edge on front side of panel.
7. Sew along line with a small straight stitch. ***(See Fig. 7-2 and 7-3.)***

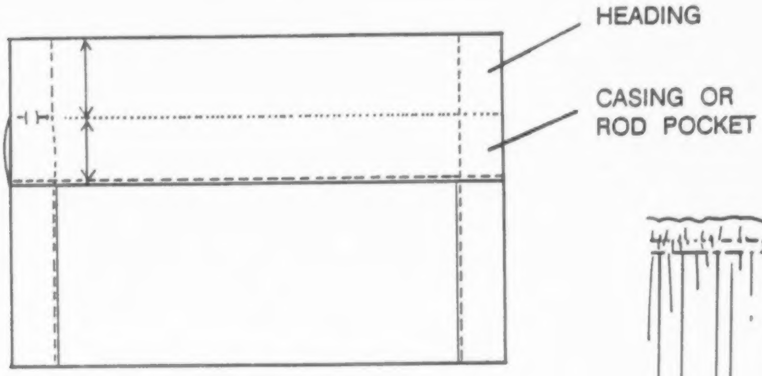


FIG. 7-2

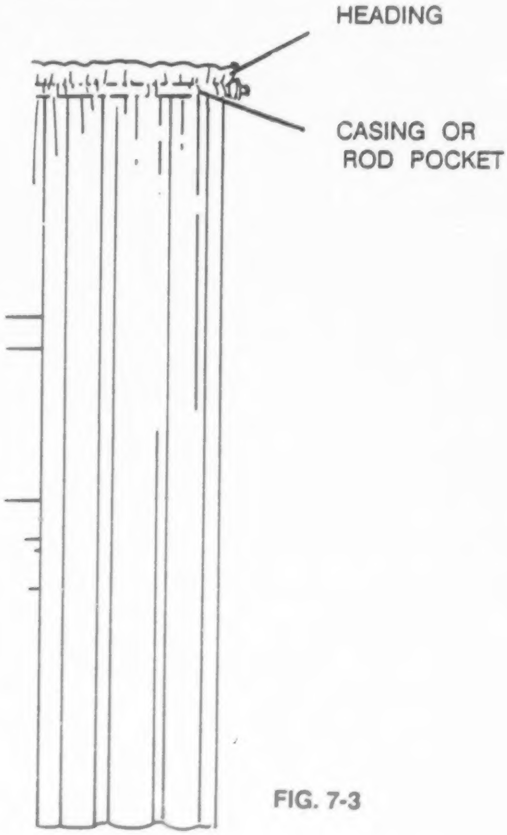


FIG. 7-3

IX. Procedure for constructing a tailored bedspread or coverlet

(Objective 8; JS 6, 7)

A. Cut fabric according to measurements.

B. Place one full width of fabric down center of bed and pin side sections to it. (This may require splitting a width of fabric. See above for directions.)

C. Sew seams. Press seams open if spread is to be lined. If not, use a French, false-French, or flat-fell seam, a serger, or a seam finish.

D. If lining is to be used, sew lining sections together. Press seams open.

E. If cording, fringe, trim, or applique is to be used, sew to right side of coverlet.

F. If coverlet is to be hemmed and turned:

    1. Pin lining to face, right sides together, matching seams and outside edges.
    2. Begin sewing at top edge, a few inches before the corner. Sew around the corner, down side, across bottom, up second side, around corner, and end a few inches beyond the fourth corner.
    3. Carefully turn right side out, poking out corners with **blunt** tool. **(Do not use scissors.)**
    4. Press edges.
    5. Finish upper edge by pressing under 5/8" on both coverlet and lining and slipstitching the opening by hand.
    6. Tack lining to coverlet at 6" to 8" intervals down seams or use attractive yarn or embroidery floss to tack at regular intervals across face.

G. If coverlet is to be bound:

    1. And if coverlet will have a batting:
        a. Spread flat lining on floor **right side down** and tape edges in several places. Backing may be slightly larger than finished top.
        b. Spread batting over lining. Batting should be flat and should extend slightly beyond the edges of lining on all four sides.
        c. Spread top of coverlet over batting **right side up**. Position top so that there is backing behind it and, if possible, extending beyond it on all four sides.
        d. With long needle and thread (light color for a light top, dark color for a dark top), baste three layers together. Start at center of quilt and baste to corners and centers of sides. Baste around outside edge.
        e. Quilt or tie.
        f. Remove basting.
    2. If coverlet will not have a batting, pin lining to coverlet with wrong sides together, matching seams and outside edges.
    3. Apply binding. (See Unit VI--Trims and Finishes for instructions for making and applying continuous bias binding.)
    4. If coverlet is not quilted, tack lining to coverlet at 6" to 8" intervals down seams or use attractive yarn or embroidery floss to tack at regular intervals across face.

X. Procedures for constructing a dust ruffle

A. Measure according to instructions above. If width of fabric can be split lengthwise, split it.

B. Cut and seam fabric so that the length of the fabric piece is 2-1/2 times (or fullness desired) the side of the bed to be covered. You will have four separate pieces of fabric. All seams must be finished.

C. Hem sides of each dust ruffle piece. Sew hems with a straight machine stitch and matching thread.

D. Hem bottom edge of each dust ruffle piece. Depth of hem will depend on the amount allowed. Sew hem with a straight machine stitch and matching thread.

E. Prepare mattress cover.

  1. Mattress cover can be made from muslin pieced to fit or from a muslin sheet cut to fit. Allow seam allowance of 1/2" on all sides.
  2. Hem any side which will not have a ruffle attached.
  3. Mark half and quarter points on all sides where ruffle will be attached.

     OR

  4. Mark one yard intervals on all sides where ruffle will be attached.

F. Gather ruffle pieces by zigzagging over a cord.

  1. Gather each side piece separately from end to end.

     OR

  2. Gather in 2-1/2 yard segments.

G. Pull threads, matching markings. Pin in place.

H. Sew in place. If one yard intervals were used, sew one section at a time.

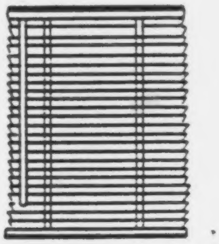
I. Repeat around bed.

J. Finish seams by serging or zigzagging.

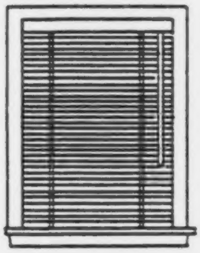
K. Press. Seam allowance should be pressed toward muslin cover.

Window Treatments

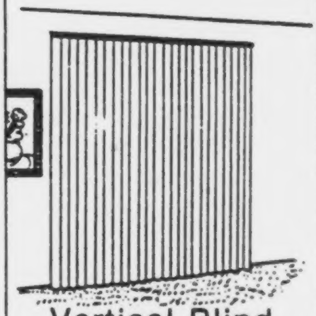
TM 1



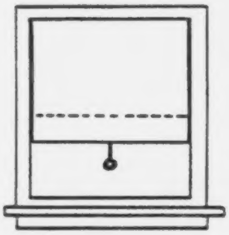
Venetian Blind



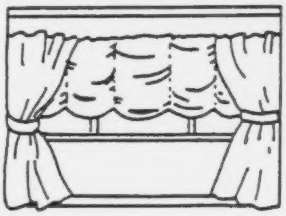
Mini Blind



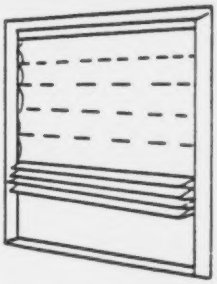
Vertical Blind



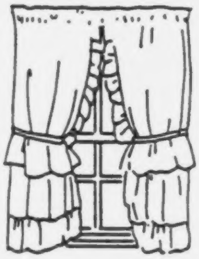
Traditional Shade



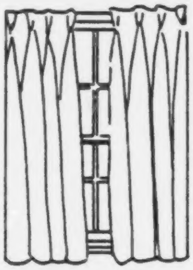
Austrian Shade



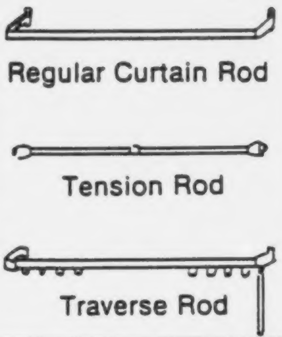
Roman Shade



Curtains



Draperies



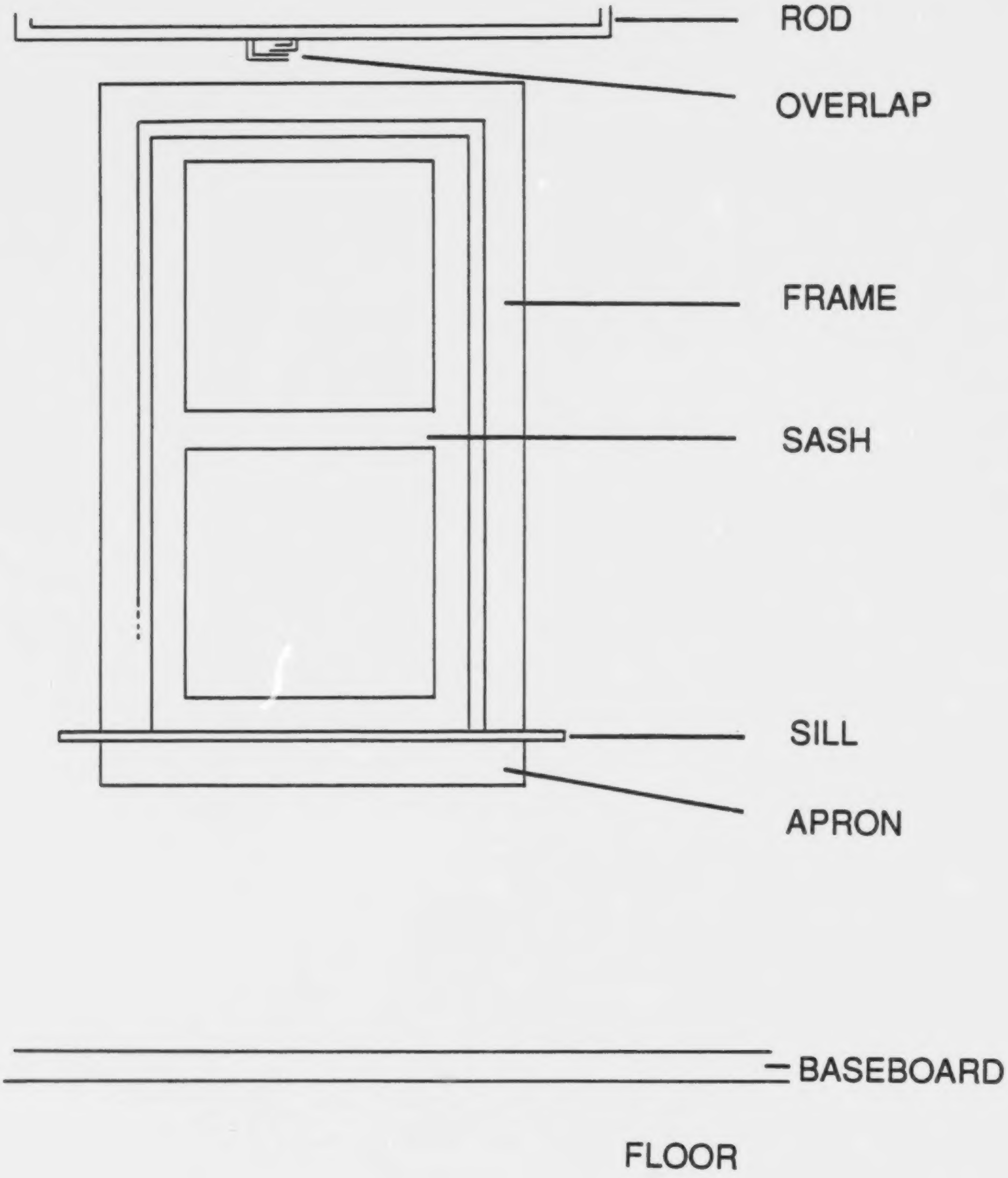
Regular Curtain Rod

Tension Rod

Traverse Rod

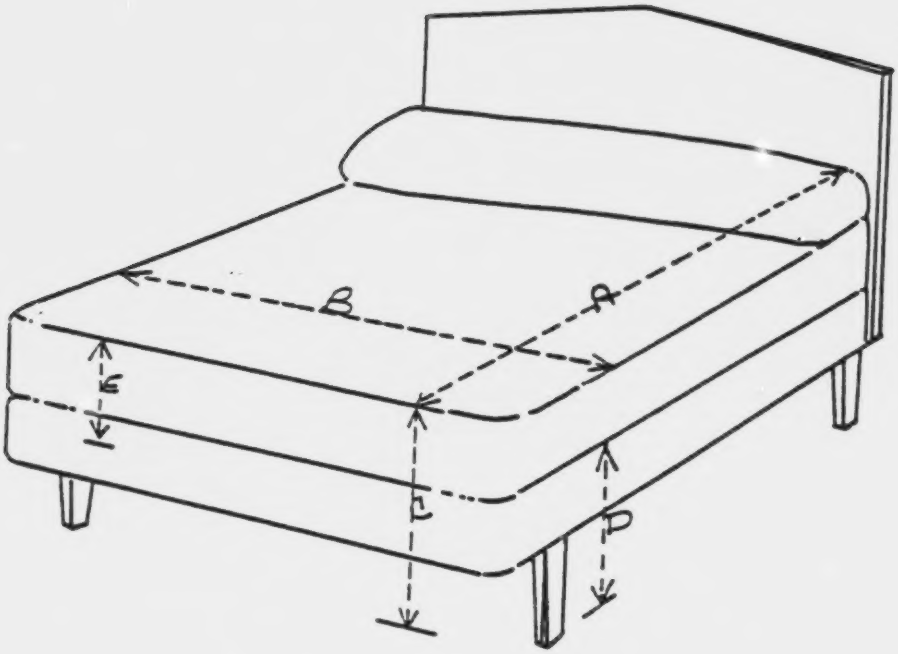
Parts of a Window

TM 2


ROD
OVERLAP
FRAME
SASH
SILL
APRON
BASEBOARD
FLOOR

Measuring a Bed

TM 3



A. LENGTH

B. WIDTH

C. DROP FOR FULL SPREAD

D. DROP FOR DUST RUFFLE

E. DROP FOR COVERLET

WINDOWS AND BEDS

UNIT VII

HANDOUT 1--CONVERSION CHART FOR USING SHEETS

	Flat Sheet Size		Approx. Fabric Yardage		
	Attached Hem (Separate)	Self Hem (Turned Under)	36"	45"	58"
Twin	66" x 94"	66" x 104"	5	4	3-1/8"
Full (Double)	81" x 94"	81" x 104"	6	4-1/4	3-7/8
Queen	90" x 100"	90" x 110"	7	5-7/8	4-1/2
King	108" x 100"	108" x 110"	8-3/4	7	5-1/8

WINDOWS AND BEDS

UNIT VII

JOB SHEET 1--EXPLORE WINDOW TREATMENTS

Directions: There are many styles of window treatments requiring different types of hardware and different construction procedures. To broaden your knowledge of the possibilities, do one or more of the following activities:

A. Make a poster showing as many different styles of window treatments as you can find in magazines such as Good Housekeeping, Woman's Day, Ladies Home Journal, or catalogs from J.C. Penney's or Sears.

B. Make a poster showing as many different types of hardware for window treatments as you can find. Show window treatment using these different kinds of hardware.

C. Make a poster showing as many different styles of bed coverings as you can find in magazines such as Good Housekeeping, Woman's Day, Ladies Home Journal, or catalogs from Penney's or Sears.

D. Using a real or imaginary room, design window treatments and bed coverings and coordinated accessories. Present your ideas to the class. Show colored layouts and fabric swatches that you would use.

WINDOWS AND BEDS

UNIT VII

JOB SHEET 2--MEASURE WINDOW FOR DRAPERY CONSTRUCTION

Materials and equipment:

Window to be measured
Yardstick or metal measuring tape
Pencil and paper

Steps of Procedure:

1. Measure the length of the window and record:
    a. Top of frame to sill
    b. Top of frame to apron
    c. Top of frame to sash
    d. Top of frame to baseboard
    e. Top of frame to floor
2. Measure from ceiling to:
    a. Top of frame
    b. To floor
    c. To baseboard
3. Measure width from side to side.
4. Measure the return, if any.
5. Measure the overlap, if any.
6. Measure from one end of the drapery rod to the other.
7. Measure the width and length of the valance or any other treatment desired.
8. Determine the finished length by measuring from the top to the point where the curtain or drapery will end.
9. Determine the finished width of the curtain or drapery.
10. Determine the total width of fabric required.
11. Determine the number of fabric widths required. (If fabric width is not known, assume 45".)
12. Determine the total length of fabric panels required.
13. Determine the number of fabric panels required.
14. Determine the total yardage required.

WINDOWS AND BEDS

UNIT VII

JOB SHEET 3--MEASURE BED FOR BEDSPREAD CONSTRUCTION

Materials and equipment:

Bed to be measured
Yardstick or metal measuring tape
Pencil and paper

Steps of Procedure:

1. Measure top length.
2. Measure top width.
3. Measure the drop:
    a. For full length drop
    b. For coverlet drop
4. Determine length of fabric panels needed.
5. Determine total yardage needed.

WINDOWS AND BEDS

UNIT VII

JOB SHEET 4--MEASURE BED FOR DUST RUFFLE CONSTRUCTION

Materials and equipment:

Bed to be measured
Yardstick or metal measuring tape
Pencil and paper

Steps of Procedure:

1. Measure box spring length.
2. Measure box spring width.
3. Measure the drop.
4. Determine the distance around the bed.
5. For a gathered dust ruffle, determine finished length, including fullness.
6. Determine width of fabric needed.
7. Determine whether fabric widths can be split.
8. Determine number of yards of fabric needed.

WINDOWS AND BEDS

UNIT VII

JOB SHEET 5--CONSTRUCT A PANEL CURTAIN OR UNLINED DRAPE

Materials and equipment:

Fabric
T-square or plastic ruler marked in both directions
Basic sewing supplies
Window measurements

Steps of Procedure:

1. Straighten fabric by pulling a thread or using a T-square or ruler with perpendicular lines marked.

2. Cut fabric according to measurements.

3. Piece widths into two panels.

4. Make lower hems.

5. Make side hems.

6. Make heading and casing at top.

WINDOWS AND BEDS

UNIT VII

JOB SHEET 6--CONSTRUCT A TAILORED BEDSPREAD

(NOTE: This project may be done on a doll bed. The steps are exactly the same but much less fabric is required and the smaller size is easier to handle.)

Materials and equipment:

Fabric
T-square or plastic ruler marked in both directions
Basic sewing supplies
Bed measurements

Steps of Procedure:

1. Determine type of spread to make--with or without cording, with or without binding, with or without lining.
2. Measure bed with style of spread in mind.
3. Straighten fabric by pulling a thread or using a T-square or ruler with perpendicular lines marked.
4. Cut fabric according to measurements.
5. Piece widths together.
6. If lining is to be used, piece lining widths together.
7. Add detail (applique, embroidery, quilting, etc.), if desired.
8. Finish outside edge with hem.

   OR

   Finish outside edge with binding.

WINDOWS AND BEDS

UNIT VII

JOB SHEET 7--CONSTRUCT A DUST RUFFLE

(NOTE: This project may be done on a doll bed. The steps are exactly the same but much less fabric is required and the smaller size is easier to handle.)

Materials and equipment:

Fabric
T-square or plastic ruler marked in both directions
Basic sewing supplies
Bed measurements

Steps of Procedure:

1. Straighten fabric by pulling a thread or using a T-square or ruler with perpendicular lines marked.
2. Cut fabric according to measurements.
3. Seam sections together as needed.
4. Hem sides.
5. Hem bottoms.
6. Put in gathering stitches at top.
7. Cut a piece of fabric the size of top of box springs plus 5/8" seam allowance on all four sides.
8. Mark half and quarter points on all sides. Mark half and quarter points on ruffle sections **OR** mark one-yard intervals on box spring cover and 2-1/2 yard intervals on dust ruffle fabric.
9. Pull threads on ruffle and match markings. Pin in place.
10. Sew. Press. Put on mattress.

WINDOWS AND BEDS

UNIT VII TEST

Part I--Matching: Match each term with its definition by writing the letter(s) in the space provided.

a. Casing
b. Coverlet
c. Drop
d. Dust ruffle
e. Frame
ab. Motif
ac. Overlap
ad. Repeat
ae. Return
bc. Sash
bd. Sill

___ 1. Distance from the top of a mattress down the side of the bed to the edge of the coverlet

___ 2. Distance one drapery panel laps over the other when closed

___ 3. Distance between the wall and the front of rod

___ 4. Amount of fabric required to exactly match the motifs in the fabric when panels are placed side by side

___ 5. Shelf-like part at the bottom of a window

___ 6. Part of window containing glass

___ 7. Design on a piece of fabric

___ 8. Another name for a rod pocket

___ 9. All the trim around the window

___ 10. Covers box spring and extends to the floor

___ 11. Bed covering similar to spread that covers top of bed and extends over mattress

Part II--Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 12. Which items are usually added to the measurement of the length of a window?

a. Fullness desired
b. Amount for hems
c. Amount for return
d. Amount of shrinkage
e. All of the above

___ 13. Which items are usually added to the measurement of the width of a window?

a. Amount for seams
b. Amount for repeat
c. Amount for side hems
d. Amount for heading
e. All of the above

___ 14. Which statement applies to dust ruffles?

a. Cover all four sides of the bed
b. Are lined
c. Are sewn to muslin the size of the box spring
d. Are always 14" from top to bottom
e. All of the above

___ 15. Why are fabrics with a fabric finish a good choice?

a. Improve appearance
b. Make fabric resistant to stains
c. Add stability
d. All of the above

Part III--True or False: Write "T" before the statement that is true and "F" before the statement that is false.

___ 16. The width of the fabric will determine the yardage needed.

___ 17. Fabric with a motif that requires matching will require more fabric than an overall pattern or a solid color.

___ 18. Curtains and draperies may provide privacy.

___ 19. A sheer fabric is used to add insulation.

___ 20. Double hems prevent shrinking.

___ 21. When making a coverlet, a full width of fabric is always centered on the bed.

___ 22. A split width in a drapery should be placed in the center of the window.

___ 23. All drapery fabric can be washed.

___ 24. Double hems on curtains and draperies make them hang more gracefully.

___ 25. Sheeting is a good buy for making coverlets and dust ruffles because it provides a large piece of fabric with few seams.

___ 26. Drapes have ruffles.

___ 27. A width of fabric may sometimes be split to save expenses on a dust ruffle.

WINDOWS AND BEDS

ANSWERS TO UNIT VII TEST

Part I:

1. c
2. ac
3. ae
4. ad
5. bd
6. bc
7. ab
8. a
9. e
10. d
11. b

Part II:

12. b
13. c
14. c
15. d

Part III:

16. T
17. T
18. T
19. F
20. F
21. T
22. F
23. F
24. T
25. T
26. F
27. T

APPENDIX A

HELPFUL RESOURCES

★(NOTE: These resources are available for Missouri educators on free loan from Missouri Vocational Resource Center, 8 London Hall, Columbia, MO 65211 [800/392-7217].)

I. Books and Curriculum Guides

A. Belleau, Bonnie D. "Self Checking Lessons In Clothing Construction." Portland, ME: J. Weston Walch.

B. Brown, Gail, and Pati Palmer. Sewing with Sergers: The Complete Handbook for Overlock Sewing. Portland, OR: Palmer-Pletsch, 1985.

C. Butterick. Vogue Sewing. New York: Harper & Row, 1982.

D. Bystrom, Adoree Evans. The Tailoring Process: Custom & Simplified. Cincinnati: South-Western Pub. Co., 1985.

E. Cabrera, Roberto, and Patricia Flaherty Meyers. Classic Tailoring Techniques: A Construction Guide for Women's Wear. New York: Fairchild Publications, 1984.

F. Clothing Assistant. Lubbock, TX: Instructional Materials Center, University of Texas Press, 1983.

G. Davis, Ronald I. Men's Garments 1830-1900: A Guide to Pattern Cutting. London: Batsford, 1989.

H. Farmer, Bonnita M., and Lois M. Gotwals. Concepts of Fit: An Individualized Approach to Pattern Design. New York: Macmillan, 1982.

I. Gebbia, Anthony S., and Master Designer. Modern Method of Women's & Children's Garment Design: Measurement Charts, Pattern Drafting, Grading. Chicago: Master Designer, 1981.

J. Godfrey, Frank P. An International History of the Sewing Machine. London: R. Hale, 1982.

K. King, Rosalie Rosso. Textile Identification, Conservation, and Preservation. Park Ridge, NJ: Noyes Publications, 1985.

L. Levenson, Helene. Creating an Interior. Englewood Cliffs, NJ: Prentice-Hall, 1980.

M. Lyle, Dorothy C., and J. Brinkley. Contemporary Clothing. Peoria, IL: Bennett, 1983.

N. McCall Pattern Guide to Sewing Power. Dubuque, IA: Kendall-Hunt, 1983.

O. Neal, Mary. Custom Draperies In Interior Design. New York: Elsevier Science, 1982.

P. Singer Sewing Reference Library. Cy DeCosse Incorporated, 5900 Green Oak Drive, Minnetonka, MN 55343 (800/328-0590, ext. 725; 612/936-4700).

1. Clothing Care and Repair, 1986.
2. Creative Sewing Ideas, 1990.
3. Decorative Machine Stitching, 1990.
4. More Sewing for the Home, 1987.
5. Quilting by Machine, 1990.
6. Sewing Activewear, 1986.
7. Sewing Essentials, 1986.
8. Sewing for Children, 1988.
9. Sewing for Style, 1986.
10. Sewing for the Home, 1986.
11. Sewing Knits, 1991.
12. Sewing Lingerie, 1991.
13. Sewing Pants that Fit, 1989.
14. Sewing Projects for the Home, 1991.
15. Sewing Specialty Fabrics, 1986.
16. Sewing With an Overlock, 1989.
17. Tailoring, 1988.
18. The Perfect Fit, 1987.
19. Time Saving Sewing, 1987.

Q. Stamper, Anita A.; Sue Humphries Sharp; Linda B. Donnell. Evaluating Apparel Quality. New York: Fairchild Publications, 1986.

R. Sunset Books, ed. Curtains, Draperies, and Shades. Menlo Park, CA: Lane, 1981.

S. Vanderhoff, M. Clothes, Clues and Careers. Lexington, KY: Ginn (Xerox Corp.), 1981.

T. Weber, Jeanette. Clothing: Fashion, Fabrics, Construction. Mission Hills, CA: Glencoe Div. of Macmillian/McGraw-Hill, 1989.

★U. Westfall, Mary G. Successful Sewing. South Holland, IL: Goodheart-Wilcox, 1990.

V. Wyllie, Ethel. Today's Custom Tailoring. 3rd ed. Peoria, IL: McKnight Div. of Glencoe, 1987.

II. Leaflets

A. Simplicity Pattern Company, Inc., 901 Wayne Street, Niles, MN 49121-0099 (800/843-8089 to order teaching kit).

1. Action-Packed Sewing
2. Fabric Sewing Guide
3. Fasten It!
4. Fuss-Free Guide to Fitting Pants
5. Guide to Sewing for Children
6. Indispensable Interfacing
7. Metric's Sew Easy
8. Napped Fabric Know How

9. Sewing for Beginners
10. Sewing with Wool Jersey
11. Sewing Sheers and Laces
12. Sewing Synthetic Suedes and Leathers
13. Simple Pattern Adjustments
14. Tailoring Today

B. University of Missouri Extension Publications (Available from the University Extension Center in each county or from Extension Publications, 2800 Maguire, University of Missouri, Columbia, MO 65211 [314/882-7216]. Write for pricing details and complete catalog.)

1. ALTERATIONS

MP0545	Alterations for a Good Fit in Men's and Women's Apparel
GH0431	Narrowing Lapels and Collars

2. CLOTHING CARE

GH0134	Home Laundry: Getting the Results You Want
MP0663	Stain Removal from Washable Fabrics

3. CLOTHING CONSTRUCTION

GH0992	Building a Workable Wardrobe
GH0784	Clothing for Men and Women with Arthritis
GH0721	Good Fit in Men's and Women's Apparel
GH0635	Kids and Clothes
GH0711	Men's Wear I: Body Dimensions and Wardrobe Coordination
GH0712	Men's Wear II: Garment Fit, Quality and Care
GH0653	Selecting Clothing for Handicapped Children
GH0405	Use and Fit of a Pattern

4. DESIGN

GH0550-54	Designs for You: Parts I-V
GH0771	Dressing Slim

5. FABRICS AND TEXTILES

RP0174	Facts about Fabric Flammability

6. READY-MADES

GH0851	Insulated Outerwear: Fabrics and Fillings
GH0824	The Clothing Market Place: Look to the Label

7. HOME FURNISHINGS

GH2066	Care of Valuable Possessions, Furniture, Tapestries, Rugs, Textiles, Paintings, etc.
RP0243	Decorating with Fabric: Making Shades

RP0255	Decorating with Fabric: Making Curtains and Draperies
GH0981	Fabrics for the Home: Choosing Draperies
FO0069	How to Upholster Dining Room and Kitchen Chairs
EC0690	How to Upholster Chairs
EC0798	Make Your Own Chair Covers
EC0793	Make Your Own Draperies

III. Audiovisuals

A. Videos, booklets and catalog from Nancy's Notions, Ltd., 333 Beichl Avenue, PO Box 683, Beaver Dam, WI 53916-0683 (800/848-0392).

1. Appliqué: Basic to Creative, 1989. 60 min. (#SN-305)
2. Blazers and Vests--Beyond the Basics, 1990. 60 min. (#SN-325)
3. Busy Woman's Fitting Techniques, 1988. 60 min. (#SN-905)
4. Busy Woman's Sewing Combo, 1988. 120 min. (#SN-218)
5. Contemporary Serging, 1987. 60 min. (#SN-812)
6. Decorating on the Double, 1991. 60 min. (#SN-430)
7. Designer Wearables, 1991. 60 min. (#SN-525)
8. Elastics Update, 1991. 30 min. (#SN-535).
9. Fitting for Style, 1991. 60 min. (#SN-440)
10. Fuse, Press, Success! 1991. 60 min. (#SN-425)
11. Organizing Your Sewing Area, 1990. 30 min. (#SN-340)
12. Personalizing Patterns, 1990. 60 min. (#SN-335)
13. Plaid Pointers, 1991. 30 min. (#SN-445)
14. Quick Jackets, 1991. 60 min. (#SN-510)
15. Quick Napkin Creations, 1991. 30 min. (#SN-520)
16. Quilting Options, 1991. 60 min. (#SN-515)
17. Serge, Sew and Decorate with Fabric, 1989. 60 min. (#SN-310)
18. Serger Feet on the Go, 1991. 60 min. (#SN-540)
19. Sew an Heirloom, 1991. 60 min. (#SN-545)
20. Sew à la Art, 1990. 60 min. (#SN-410)
21. Sportswear--Serge It/Sew It, 1990. 60 min. (#SN-330)
22. Stitch-Again Wardrobe, 1991. 60 min. (#SN-530)
23. Thread to Feet--Untapped Ideas, 1990. 60 min. (#SR-320)

B. Pellon Teaching Aids and Literature Series. Available from Nancy's Notions, Ltd., 333 Beichl Avenue, PO Box 683, Beaver Dam, WI 53916-0683 (800/848-0392). Freudenberg Nonwovens, Pellon Division, 119 West 40th Street, New York, NY 10018 (800/833-0690).

1. Fibers, Fabrics and Function (video), 1991. 30 min.

C. Videos from Career Aids Div., Opportunities for Learning, 941 Hickory Lane, PO Box 8103, Mansfield, OH 44901-8103 (800/243-7116)

1. Sewing Video Series: Craft and Gifts to Sew; Sew a Wardrobe in a Weekend; Speed Sewing--10 Super Tips, 1989. 30 min. each. (#112918-HES)
2. Fashion Your Figure, 1988. 33 min., teacher's guide. (#100533-HES)

D. Videos by the Curriculum and Instructional Materials Center (CIMC), Oklahoma Department of Vocational and Technical Education, 1500 West Seventh Avenue, Stillwater, OK 74074-4364 (800/654-4502).

1. Fabrics and Textiles, 1988. 8:45 min. (#HE 7106)
★2. Personal Clothing Management: Unit V--Construction Techniques, 1986. 34 min. (HE video 10)
3. Personal Clothing Management: Unit VI--Altering Ready-to-Wear, 1986. 67 min. (#HE7023)

E. Videos from the Agricultural Communications Center, University of Idaho, Moscow, ID 83843-4196 (208/885-6436).

1. Sergers, The Basics, 1986. 23 min. (#294)
2. Sergers, Construction Methods, 1986. 28 min. (#295)
3. Serger Shopping, 1988. 18 min. (#518)

F. Filmstrips from McCalls Pattern Company, Box 9119, Manhattan, KS 66502-9990 (913/776-4041).

1. Birth of a Pattern, 1986. 20 min.
2. Focus on Fit, 1983. 22 min.

G. Videos from NASCO, 901 Janesville Avenue, Fort Atkinson, WI 53538 (800/558-9595)

1. Beginning Sewing Techniques, 1988. 30 min. (#WA11803H)
2. Sewing with Sergers--Basics, 1990. 60 min. (#WA12136H)

H. The Learning Seed, 330 Telser Road, Lake Zurich, IL 60047 (800/634-4941).

★1. Color in Clothing (HE video 73), 1991. 20 min.

2. What Everyone Should Know About Fabrics, Part I and II (filmstrips or still video), 1985. 27 min. (#73)

I. American Media Incorporated, 1454 30th St., W. Des Moines, IA 50265 (800/262-2557)

★1. Professional Presence (BOE video 57), 1989, 24 min.

IV. Computer Software

A. Orange Juice Software Systems, 338 South Arch Avenue, New Richmond, WI 54017 (715/246-3588)

1. Know Your Pattern (Apple 5 1/4" or 3 1/2" disks). (#HE2010)
2. The Pattern Layout Simulator (Apple 5 1/4" or 3 1/2" disk). (#HE3020)
3. Design Elements and Principles (Apple 5 1/4" disks). (#HE1090)
4. Techniques of Sewing Series (Apple 5 1/4" disks).
    a. Staystitching (#HE2030)
    b. Edgestitching (#HE2040)
    c. Gathers (#HE2050)

        d. Darts (#HE2060)

    5. Care for Your Wear (Apple 5 1/4" or 3 1/2" disks). (#HE8060) Combines interactive tutorial with reference guide.

B. The Learning Seed, 330 Telser Road, Lake Zurich, IL 60047 (800/634-4941).

    1. Clothing Quiz (IBM or Apple II). (#74)
    2. Fiber Basics for Clothing (IBM or Apple II). (#98)

V. Sewing Publications

(NOTE: Because subscription prices change, write or call for current information.)

A. Sew Business. Gralla Publications, 15400 Knoll Trail Drive, Dallas, TX 75248. Monthly trade newspaper magazine designed for fabric stores focusing on merchandising trends, new products coming on the market, and a fabric forecast.

B. Sew News. P.J.S. Publications, Inc., Box 1790, News Plaza, Peoria, IL 61656 (309/682-6626). Monthly newspaper on up-to-date sewing techniques, new machines and products, fashion news, and ads pertaining to every phase of sewing.

C. Silver Thimble. Valley Brook Enterprises, Inc., 311 Valley Brook Road, McMurray, PA 15317 (412/941-1360). Monthly sewing and fashion report geared to keep the home sewer up-to-date.

D. Sewing Update. Palmer/Pletsch Sewing Update, 2269 Chestnut St., #269, San Francisco, CA 94123 (415/931-7370). Bimonthly newsletter for fashion sewing.

E. The Needle's Eye Worldwide. Union Special Corp., 222 N. LaSalle St., Suite 900, Chicago, IL 60601-1079 (312/606-9500). Bimonthly.

APPENDIX B

GLOSSARY OF TERMS

Accordion pleats--very narrow pleats which are pressed along the entire length of the garment. The folds resemble an accordion.

Applique--small piece or pieces of fabric cut into shapes and applied by hand or machine on top of a background fabric for decoration

Apron--trim below the window sill

Armscye--armhole

Backstitch--reinforcement at the beginning and end of a seam done by stitching backwards for a few stitches

Baseboard--molding that extends up the wall from the floor

Balance--achieved when garment hangs at equal distances from the body on the right and left and on front and back

Basic pattern--fitted pattern with simple design lines, sleeves, skirt, bodice, and neckline facings; used to make a pattern that exactly fits the body; usually made in muslin (since muslin can be taken apart and used as a pattern)

Batting--sheet of (usually) polyester filling placed between the face and backing of quilts and some coverlets. Batting must be quilted or tied in place to keep it from bunching with wear and washing. Batting may also be made from wool, cotton, silk, or a combination of fibers.

Beading--narrow strip of open-work through which ribbon can be inserted; small beads applied singly or in groups to create a design

Bed--flat base of the machine which supports the head and houses the bobbin and bobbin case

Beeswax--used to strengthen thread and prevent snarling and snagging

Belt--strip of fabric (usually matching) which is placed at the waistline of a garment. It is usually either all fabric and tied, or a covered piece of stiffening with a buckle.

Belt carriers--self-fabric strips attached to waistband or side seam of garment to hold a belt in place

Belt loop--thread or fabric loop used to hold belt in place

Belting--stiff, ribbon-like banding used inside a waistline as a stay or covered with fabric and used outside as a belt

Bias binding--strip of fabric cut on the bias (45 degree angle) of the fabric to provide stretch and ease in application; used to finish an outside edge

Bias nonwoven interfacing--fabric that stretches in all directions

Binding--piece of fabric added to the garment/product to finish the outside edge

Blend--combination of at least two different fibers in one yarn (a blended fabric) or a fabric made from two or more different yarns (a combination fabric)

Blindstitch--hand- or machine stitch used for hemming and holding facings in place. This stitch is invisible (or almost invisible) on the outside of the fabric.

Blind-tucks--when the fold of each tuck touches or overlaps the next, covering the stitching line

Bobbin hook race/shuttle--circular piece of metal surrounding the bobbin that turns to catch the upper thread and the bobbin thread to form the stitch

Box pleats--two side pleats which turn away from each other

Braid--woven, novelty trim finished on both sides

Button--used to close a garment and to accent; comes in two types, sew-through and shank

Button foot--a small machine foot used to apply buttons

Cafe curtain--tiered curtain which can be shirred onto rods or made with pleated tops. It may be used in combination with a valance or decorator shade.

Cam--circular piece of metal or plastic, either built-in or inserted into the machine, that controls stitch formation by its outer edge indentations; used to make decorative stitches

Casing--tunnel at the top of a curtain; open at both ends so a curtain rod or pole can be inserted

Catchstitch--cross stitch used to hold raw edges in place securely; a stable and secure stitch used in areas where edges need to be flat; particularly good for heavy fabrics

Chevron--"V" pattern formed by sewing plaid or striped fabric on the bias and matching at seams

Circular ruffle--ruffle cut in a circle. Fullness is created when the inner curve of the circle is straightened.

Classic--traditional style that can stay in fashion for a very long time. Examples include the blazer jacket and blue jeans.

Clip--snips made into seam allowance, especially for inward curves. Do not use on curves which have strain such as crotch seams and armhole edges.

Collar fall--part of the collar which covers the collar stand

Collar roll line--foldline between the collar stand and the fall; the line on which the collar turns

Collar stand--section of a two-part collar that lies against the neck

Commercial pattern--fully developed fashion pattern which gives all pieces, layouts, and sewing instructions

Compatibility--having the same care qualities

Compressed air--used to remove dust and lint from machine; available in cans at sewing and fabric stores

Continuous bias--long, bias strip made from a square or rectangle of fabric

Continuous lap--single piece of fabric used for placket facing

Conventional machine--multi-purpose sewing machine designed to perform utility and decorative stitching

Convertible collar--may be worn open as a partial roll collar or closed as a standing collar with a fall

Cording--piece of cord covered with bias fabric and inserted between seams

Couture--sewing or needlework; the product of a dressmaker

Coverlet--spread, similar to a bedspread, which covers the top of the bed and extends only a little way down the mattress

Cuffs--wide hem made by turning the fabric back against the garment. On a sleeve, additional fabric may be added, finished, and then turned up or buttoned. On slacks, extra fabric in the length is turned up and tacked at the seams.

Curtain--window treatment, usually fabric shirred onto a rod, often with a heading

Dart or released tuck--tuck used to control fullness or shape. The fold is formed on the inside, stitched to a designated point, and then released.

Decorative stitches--fancy stitches made by hand or machine to decorate, finish, and/or add design

Design lines--silhouette of the garment resulting from the shapes, placement of parts, and placement of design details

Designer darts--darts which end about 1/2"-1" from the fullest part of the body or a body point

Directional cutting--cutting with the grain of the fabric; helps fabric maintain its original size and shape

Directional stitching--stitching with the grain of the fabric to prevent stretching or changing the shape of the seam area

Drapery--window treatment using a stiffening at the top, pleats, and special pins to attach to a drapery rod

Dress fabric interfacing--fabric such as lawn, muslin, batiste, taffeta, organdy, percale, unbleached muslin and some lining or underlining fabric; designed for use in garments, but sometimes used for interfacing

Drop--distance from the top of the mattress down the side to the edge of the coverlet or bedspread

Dropped shoulder--shoulder seam that is lowered to hang down over the top of the arm

Dust ruffle--bed treatment of fabric, either gathered or pleated, which extends from the box springs to the floor

Dye--substance added to produce or change the color

Ease--the amount of fullness added to body measurements to allow for body movement

Even plaid--plaid where the stripe arrangement is the same in both lengthwise and crosswise directions and, when folded in any direction through center of plaid, results in halves forming a mirror image

Eyelet--small hole in a garment or belt, finished by handstitching or a metal ring; used for drawstrings, cuff links, and to hold the prong of a buckle

Face--top fabric of a quilt or coverlet

Facing--a piece of fabric, fitted or bias, applied to finish the edges of necklines, armholes, and other openings in a garment

Fad--strikingly different fashion that is popular for a short period of time, perhaps a few weeks or a season, but is soon forgotten. Examples include socks with individual toes and dog-leash belts.

Fashion fabric--fabric used for construction of the garment

Fasteners--any notions used to close a garment (zippers, hooks and eyes, snaps, etc.)

Feed dogs--the teeth in a sewing machine or overlock machine, located below the presser foot, which move the fabric through the machine under the needle

Finger press--flattening an area, such as a fold or seamline, with the fingers

Flair--fullness at the bottom of a skirt, trousers, shirt, jacket, or a sleeve. The part of a garment that spreads out and widens at its lower edge.

Flat braid--braid available in many widths and colors; used singly or in several rows to create a border effect

Flat collar--collar which lies flat against the garment (e.g., a Peter Pan collar)

Fold-over braid--designed for trimming and enclosing raw edges of a garment, such as a neckline or sleeve opening. The top (right) side of a fold-over braid is narrower than the back side.

Frame--all the (usually wooden) trim around the window

Gathers--small, soft folds made by drawing fabric up on a line of hand or machine stitching

Glovestitch--decorative, topstitching technique done by hand. The stitches are the same size on top and on the underside.

Grade--to remove bulk by trimming seam allowances to different widths

Grain--direction of fabric threads. Yarns running parallel to selvage are on the lengthwise grain, and those running from selvage to selvage are on the crosswise grain. For perfect grain, the yarns must be at right angles to each other.

Grainline--straight line on a pattern which is always placed parallel or at right angles to the selvage, unless otherwise specified

Gusset--inset of triangular shaped fabric used to give more room or to make a bias area stronger (e.g., kimono sleeve or crotch area)

Hand baste--to stitch the garment together by hand using long, running stitches

Hand of fabric--the way in which the fabric drapes over the hand; the feel; drape-ability and handling of a piece of fabric

Head--total sewing machine excluding the cabinet or base on which it rests

Heading--decorative ruffle above the casing along the upper edge of a curtain

Hem--edge finish formed by folding under the raw edge and stitching it by hand or machine

Hemming stitch--decorative, open-work stitch made by drawing lengthwise threads of the fabric and fastening the crosswise threads in clusters

Hemmed patch pocket--single piece of fabric with hem at open edge of pocket and seam allowance turned under

Hook and eye--closure made of metal used to hold two pieces of fabric together securely (often on necklines and waistbands)

Horsehair braid--used to stiffen hem edges, especially for evening or bridal wear, so they will flare out softly

In-seam pocket--This pocket does not show from the outside, but rather, is an opening in the side seam. It is generally made from lining fabric and may need to be reinforced with staystitching to prevent raveling.

Inset--a piece of fabric or trim placed into the garment by cutting an opening and seaming the garment and inset together; a piece of fabric that has been inserted into a garment for better fit or decoration

Interfacing--inner fabric that provides support or body and shape retention to areas such as necklines, collars, cuffs, waistbands, lapels, button closures, and pocket flaps

Interlining--layer of fabric placed between the lining and the fashion fabric to give warmth and bulk

Interlock knit--fabric knit on a special machine to give it a smooth, reversible face. The stretchability of these knits is dependent upon the yarn used in their construction.

Inverted pleats--two side pleats which are turned toward each other and meet

Iron-on or fusible interfacing--fabrics specially coated so that they can be applied with heat, pressure, or steam

Kimono sleeve--sleeve cut out with bodice as one piece

Knife or side pleats--series of pleats that turn in the same direction, are equal in width (usually), and are pressed straight to the hem

Knitted interfacing--fabric usually made of nylon tricot with lengthwise stability and crosswise stretch; suitable for some knit fabrics

Lace--fancy flat or ruffled trim used to finish and decorate edges or as a decorative accent

Lapel--sometimes called revere, the part of a shirt, dress, or jacket which turns back against the garment, especially front part of garment that folds back to form continuation of collar

Lay out--positioning the pattern pieces on the fabric before cutting

Lettuce leaf edging--finish used on stretchy knit or jersey fabrics to achieve a ruffled effect

Line--basic seamlines, shoulder, and side seams which usually follow the outline of the body

Lined or faced patch pocket--A lining is attached to the pocket at hem edge and the pocket is finished by stitching and turning or by hemming lining to pocket.

Lingerie strap guard--a holder constructed inside the garment to keep lingerie straps from falling off the shoulders

Lining--inner layer of lightweight fabric cut from a lining pattern and sewn separately from the garment. The lining goes on the inside of the garment to conceal the construction seams, make the garment look nicer, and add to the durability of the garment. The lining also prevents skirts and slacks from stretching. In draperies, the lining protects the outside fabric, adds body, prevents fading, and adds drape-ability.

Lockstitch--stitch formed by a needle thread and a bobbin thread, as on a conventional sewing machine

Loop--fastener made of thread, cording, or fabric that extends past the finished edges of a garment on closings that do not overlap

Looper--an arm in the machine that makes a loop with its thread. The looper threads combine with the needle threads to make the stitches.

Machine hem--hem that is completely stitched by machine, usually at 10 stitches per inch. This may be a machine-made blind hem, a narrow-rolled hem, or a topstitched hem. It is found on sportswear and home decorator items such as curtains, bedspreads, and slipcovers.

Miter--diagonal seam at the corner used to eliminate bulk and make corner neat

Motif--print or design on the fabric

Napped fabric--short surface fabrics having fibers that lay smoothly only when brushed in one direction

Nonwoven interfacing--fabric which resembles felt and has no threads. Some types have directional stretch; some may be cut in any direction.

Notions--all the extras that it takes to make a garment or product: thread, zippers, hem tape, etc.

Overlap--amount of fabric required to cover the center of a drapery rod where one drapery lies under the other when closed

Overlock machine stitch--made with three or four threads; used to sew seams and simultaneously finish seam allowances

Overlock stitch--made with two threads on a conventional sewing machine; used to finish seam allowances and edges, not to sew seams

Panel or length--yardage or amount of fabric, in full widths, required for the complete **length** of the project

Partial roll collar--in the back half (usually) of the collar which lies against the neck. The rest rolls over and covers the part which lies against the neck. The front of the collar lies against the body.

Patch pocket--separate fabric piece attached to the garment

Pin baste--placing pins at right angles to seamline in seamline to hold fabrics together. Stitching is done while pins are in place.

Pin tuck--tiny, narrow fold stitched very close to the foldline

Pinked edge--notched edge finish made with pinking shears; used on fabrics that ravel easily

Pins--used to hold the pattern to the fabric while cutting and to hold the fabric pieces together during construction

Piped pocket--The opening is covered by lips of fabric similar to a bound buttonhole. This type is used in tailored garments or as decoration.

Piping--cord enclosed in bias fabric; similar to cording, except that a smaller cord is used

Placket--opening which makes room in a part of a garment so that the garment may be put on

Pleat--fold in the fabric made by doubling the fabric over on itself, resulting in three thicknesses of fabric. It is used to control fullness in a garment.

Point presser--piece of equipment shaped so that a right angle or sharp point can be easily pressed

Pounder or pounding block--smooth piece of wood used to flatten seams after pressing

Preshrink--to wash or dry clean fabric and notions before sewing them into a garment or product so that they will not shrink after they have been sewn

Press cloth--fabric placed between the garment and the iron during pressing

Pressing mitt--small piece of equipment that fits over the hand; can be placed inside the sleeve for steaming

Pressure--amount of force the presser foot puts on the fabric during stitching. Pressure should be adjusted to suit the fabric.

Prickstitch--decorative or functional handstitch used as an edge finish or to apply zippers in tailored garments

Quality characteristics--the traits of a fiber or fabric which make it desirable

Quarter-scale pattern--pattern that is a smaller, proportional (one-fourth of the size) version of a commercial pattern without seamlines

Raglan sleeve--a sleeve, with dart or seam on top, which includes part of the shoulder of the garment

Regular stitch--10 to 12 stitches per inch. Custom sewing may be done with 12 to 24 stitches per inch for a better appearance in some fabric.

Repeat--amount of fabric required to match exactly the motifs in a fabric when panels are placed side by side

Return--distance between the wall and the front of the curtain or drapery rod

Reweaving--restoring a woven fabric to its original design by hand sewing threads back into place; repairing a snag or tear in a woven fabric

Rick rack--zigzag braid available in a large variety of sizes and colors. It can be applied into a seamline or topstitched for trim.

Roll line--the line on which a lapel or collar turns back on itself in a garment; markings sometimes found on a pattern indicating the area along which the collar and lapel are turned back

Ruffle--band of fabric, either hemmed or doubled, that is gathered or pleated and applied to a garment's edge for trimming or decoration

Ruffling--edging which gives a graceful appearance and adds weight to curtains to make them hang and drape more attractively

Saddle stitch--decorative, topstitching technique done by hand; has longer stitches on top and shorter ones on the underside

Sash--part of the window that includes the glass and its frame

Seam--stitching which holds two parts of a garment together (usually sewn on a seamline indicated on the pattern piece)

Seam board--piece of equipment used for producing flat seams, especially on wools

Seam finish--treatment of a seam to keep it from raveling or fraying

Seam sealant--liquid used to secure the end of a seam

Self-fabric interfacing--interfacing cut from the fashion fabric; used when fashion fabric is very sheer

Sequins--small, shiny, flat circles sewn on to fabric in groups or designs as a decorative accent

Serger--another name for an overlock machine

Set--way a garment lies on the body

Set-in pocket--pocket which is placed into an opening created in the garment by slashing

Set-in sleeve--a sleeve placed in a regular armhole

Sew-in interfacings--fabric that must be stitched, by hand or machine, to the fashion fabric

Shank--a stem between the fabric and the button; may be part of the button or made with thread while sewing on a button

Shoulder pad holders--a cover of garment fabric to hold a shoulder pad or a fastening to attach pad to garment and remove it easily

Shrink--to become smaller permanently. Water, steam, or dry cleaning may cause fabric or fibers in the fabric to contract or re-align.

Sill--extended part of a window at the bottom of a window sash; similar to a shelf

Sizing--chemical and/or starch added to a fabric to give it stiffness and body. It can be used to make poor quality fabric appear better. Sizing usually comes out with the first washing.

Sleeve board--small pressing board providing a flat surface on which to press sleeve seams open

Sleeve cap--the curved upper part of the sleeve between notches on a pattern, which allows for fit at top of upper arm

Slipstitch--tiny, invisible handstitch taken through a fold of fabric; used for hemming skirts, attaching pockets, finishing off waistbands, putting lining in coats and suits, and tacking facings to a garment

Slopers--basic pattern shapes used to design and alter patterns

Smocking--embroidery done on a piece of fabric gathered by hand or machine into small, regular folds

Snap--closure made of metal in two parts, a ball and a socket; used in dressmaking to close an opening

Soutache or bias braid--braid trim cut on the bias to make it stretchy; used to form and outline designs on a garment (used in Spanish design garments)

Spaced tucks--where there is a predetermined space between each tuck

Stability--lack of stretch in the interfacing

Standing collar--lies against the neck (e.g., a mandarin collar)

Staystitching--row of machine stitching which helps garment maintain its shape while being constructed

Stay-taping--applying a piece of tape on a seamline to prevent stretching

Stitch--hand- or machine stitch used for hemming and holding facings in place. This stitch is invisible (or almost invisible) on the outside of the fabric.

Stitch finger--a small bar that holds the stitches while they are being formed and keeps them from pulling the fabric in at the edge

Straight ruffle--where fullness is cut in a strip and gathered using two to three times the length of the edge it will be sewn to

Straight stitch machine--a machine that sews a straight line forward and (usually) backward. Some are available with accessories to enable them to perform other types of stitching.

Stretch--amount of flexibility in the interfacing

Structural darts--darts which end at the fullest part of the body or at a body point

Tailor's ham--oblong, firmly stuffed cushion covered in fabric of half cotton, half wool. It is designed for use while pressing the curved areas of a garment.

Tailor's hem--special hem used in bulky and heavy fabrics that do not ravel

Tension--tightness of the upper (needle) and lower (bobbin) threads which interlock to form a stitch. When the two threads are balanced, they are drawn into the fabric to the same degree.

Topstitching--machine stitching parallel to a seam or finished edge of a garment for decoration or to hold a crease on a folded or pressed edge of a seam; done from the right side

Trim--to cut off part of the seam allowance

Trims--decorative extras, such as lace, braid, piping, and decorative stitches added to create interest and design

True seamlines--to redraw seamlines so that they are as even or curved as they were before the pattern was altered

Tubing--hollow cylinder of fabric used for button loops and decorative trim

Undercollar--sometimes called a collar facing; finishes the collar and conceals raw edges

Underlining--layer of lightweight fabric that is basted to the fashion fabric and sewn as one. The underlining is cut exactly like the fashion fabric. It is added for support and to prevent stretching and sagging.

Understitching--stitching which holds seam to facing or under collar

Uneven plaid--a plaid with an unbalanced design in the crosswise or lengthwise direction, or both

Upper collar--collar which shows on finished garment

Valance--separate ruffle at the top of the window or over a curtain

Velcro®--fastener made from two nylon tape strips of looped pile that intermesh when pressed together. One strip is fleece covered and the other is burr covered.

Vertical hemming stitch--durable, stable stitch best suited to hems where hem edges are finished with hem tape or stretch lace. This is an invisible hem on the outside. Only very small stitches show on the inside.

Waistband--part of a skirt, dress, or trousers fitted about the waist and made from a separate garment piece

Weight of interfacing--refers to the firmness or lightness, stiffness or suppleness of the interfacing; usually classified as light, medium, or heavy and suit weight or outerwear weight

Welt pocket--hidden pocket with a visible slit. This may be a single or double welt and is sometimes covered with a flap.

Woven interfacing--fabric with grain lines that must be considered when cutting

Yoke--a piece of fabric added to the top front or back, or both, of blouses and skirts; adds design, fitting, and strength

Zigzag machine--a machine that sews a straight line plus other types of stitches. Most zigzag machines make buttonholes, sew on buttons, make a blind hem, and make decorative stitches.

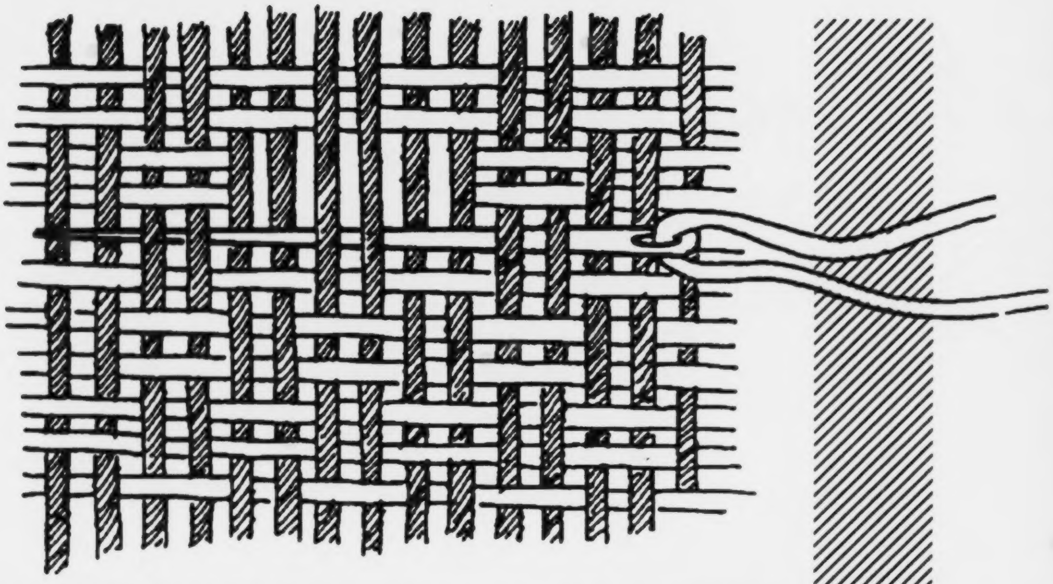
Zipper--closure made of metal or nylon chains attached to a tape so that it can be stitched into a placket

Zipper foot--small machine foot with one prong; used for stitching in zippers; usually adjustable for right or left side application

40-2203-I
Instructor Guide

Custom Sewing

MODULE THREE



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CUSTOM SEWING, MODULE 3

Unit VIII: Measuring/Fitting Problems

Unit IX: Altering Ready-Made Products

Unit X: Altering Flat Patterns

Produced by the
Instructional Materials Laboratory
University of Missouri-Columbia
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Columbia, MO 65211

Catalog No. 40-2203-I
1993

The activity which is the subject of this report was supported in whole or in part by funds from the Department of Elementary and Secondary Education, Division of Vocational and Adult Education. However, the opinions expressed herein do not necessarily reflect the position or policies of the Missouri Department of Elementary and Secondary Education or the Division of Vocational and Adult Education, and no official endorsement should be inferred.

ACKNOWLEDGMENTS

Appreciation is expressed to the many individuals who gave their time, knowledge, and talents to the development of this curriculum guide. A special thanks is extended to the following persons for:

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FOREWORD

The Custom Sewing guide, which has been divided into three modules, is appropriate for the 20.0304 Custom Apparel/Garment Seamstress program which prepares individuals to construct, alter, and prepare garments to customer specifications.

Custom Sewing has been developed not only as a curriculum guide, but also to provide the teacher with competency-based instruments for planning and evaluation, resource lists, suggested activities, and a wide variety of hands-on student materials. The guide is intended to provide a framework for instruction in custom sewing that the teacher can localize, personalize, and supplement to fit the needs of students, area of study, and individual teaching and learning styles.

This guide includes **Module 1:** Fabrics and Textiles, Adjusting the Home Sewing Machine, and Overlock Machines; **Module 2:** Construction Techniques, Applying Fasteners, Applying Trims and Finishes, and Windows and Beds; and **Module 3:** Measuring/Fitting Problems, Altering Ready-Made Products, and Altering Flat Patterns. While this guide was developed for the Custom Apparel/Garment Seamstress program, it is appropriate for use in other clothing and textiles classes.

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CUSTOM SEWING

COMPETENCY LIST

A. Using Fabrics and Textiles

1. Identify unknown fibers
2. Use textile labels to make fabric comparisons
3. Rate dye methods on fabrics for penetration and effectiveness
4. Rate quality characteristics of fabrics
5. Coordinate patterns with fabrics
6. Work with napped fabrics
7. Work with interlock (double) knits
8. Work with even and uneven plaids
9. Straighten fabric grain
10. Pretreat fabric, notions, and trims
11. Lay out and cut pattern pieces correctly for the type of fabric used

B. Taking Measurements

1. Prepare customer for measurement
2. Chart woman's measurements
3. Chart man's measurements
4. Measure windows for drapery construction
5. Measure bed for bedspread construction/dust ruffle construction

C. Altering Ready-Made Products or Pattern Design

1. Add/eliminate seam
2. Add/eliminate cuffs (sleeve and pants)
3. Change collar and/or lapels
4. Shorten/lengthen collar
5. Add/eliminate yoke
6. Remove pleats
7. Add/remove flair (pants and skirt)
8. Change darts (location and curve)
9. Change location of fasteners (e.g., buttons, buttonholes, zippers)
10. Change/substitute types of fasteners
11. Change pocket (inseam, hip, welt)
12. Make insets (alter width, length)
13. Make facing pattern
14. Make lining patterns
15. Adjust waists
16. Adjust widths of garments or products
17. Adjust lengths of garments or products
18. Shorten sleeves
19. Reweave hole in garment/product

D. Adjusting the Home Sewing Machine

1. Adjust lower thread tension

2. Adjust presser foot pressure
3. Adjust upper thread tension
4. Clean machine
5. Clear bobbin hook race
6. Replace needle

E. Adjusting the Home Overlock Machine

1. Thread the overlock machine
2. Adjust tensions
3. Clean machine
4. Replace needles

F. Demonstrating Construction Techniques

1. Transfer pattern markings
2. Attach underlining/interlining
3. Attach lining
4. Hem garment/product
5. Apply interfacing (fusible and nonfusible)
6. Staystitch garment/product pieces
7. Apply stay strip
8. Construct dart
9. Construct seam
10. Ease/gather fullness into seam
11. Construct a patch pocket
12. Apply topstitching
13. Construct an inseam pocket
14. Construct a welt pocket
15. Construct a front hip pocket
16. Perform understitching
17. Construct collar
18. Construct facing
19. Construct jacket collar and lapels
20. Construct shirt tab (neckline placket)
21. Attach sleeve placket
22. Construct sleeve cuff
23. Construct set-in sleeve
24. Construct kimono sleeve
25. Construct gusset
26. Construct raglan sleeve
27. Construct pants cuffs
28. Construct pleat
29. Construct tuck
30. Construct ruffle
31. Construct waistband
32. Construct belt loops/carriers
33. Construct casing (fold down and applied)
34. Construct lingerie strap guard
35. Miter corner
36. Baste garment/product together for fitting

37. Fit garment/product
38. Remove spots and stains
39. Press completed garment/product
40. Construct draperies
41. Construct bedspread (tailored and with bed ruffle)

G. Applying Fasteners

1. Attach buttons (sew-through and shank)
2. Construct buttonholes and loops
3. Attach eyelets
4. Attach snaps (sew-through and gripper)
5. Attach hook and eye
6. Attach tape fasteners (i.e., Velcro, snaps, hook and eye, etc.)
7. Construct belt
8. Insert zippers

H. Applying Trims and Finishes

1. Apply applique
2. Apply braids
3. Apply cording/piping
4. Apply decorative stitches (by machine and by hand)
5. Apply lace
6. Apply lettuce (ripple) edging
7. Apply sequins
8. Apply beading
9. Smock pieces
10. Construct continuous bias strip
11. Construct cording
12. Construct piping
13. Construct tubing

I. Altering Flat Patterns

1. Adjust pattern for neckline differences
2. Adjust pattern for shoulder differences
3. Adjust pattern for arm differences
4. Adjust pattern for chest/bust differences
5. Adjust pattern for back differences
6. Adjust pattern for waist differences
7. Adjust pattern for abdomen differences
8. Adjust pattern for hip/buttock differences
9. Adjust pattern for thigh differences
10. Adjust pattern for crotch differences
11. Adjust pattern for leg length differences
12. Lengthen/shorten pattern
13. Increase/decrease width of pattern
14. True pattern seamlines after adjustment

Custom Sewing

Measuring/Fitting Problems
Unit VIII

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1		1			1, 4	
-	2		1			2, 3	
B1	3					5	
B2	4				1		
B3	5				2		
-	6				3		
-	7				4		
-	8					6-10	
-	9		2		5		
-	10		2		5		

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

MEASURING/FITTING PROBLEMS

UNIT VIII

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to measure a customer, choose the appropriately sized commercial pattern category, identify fitting problems, and determine where a commercial pattern must be adjusted. Competencies will be demonstrated by correctly performing the procedures outlined in the Job Sheets.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Based on the content outline and Handout 1, IDENTIFY MEASUREMENTS USED TO DETERMINE WOMEN'S PATTERN SIZE by achieving 100 percent accuracy on the Unit Test.
2. Based on the content outline and Handout 1, IDENTIFY MEASUREMENTS USED TO DETERMINE MEN'S PATTERN SIZE by achieving 100 percent accuracy on the Unit Test.
3. Based on the content outline, PREPARE CUSTOMER FOR MEASUREMENT by achieving 100 percent accuracy on the Unit Test.
4. Based on the content outline, MEASURE A WOMAN AND CHART THE MEASUREMENTS by completing Job Sheet 1.
5. Based on the content outline, MEASURE A MAN AND CHART THE MEASUREMENTS by completing Job Sheet 2.
6. Based on the content outline, COMPARE WOMEN'S BODY MEASUREMENTS TO PATTERN by completing Job Sheet 3.
7. Based on the content outline, COMPARE MEN'S BODY MEASUREMENTS TO PATTERN by completing Job Sheet 4.
8. Based on the content outline, IDENTIFY FITTING PROBLEMS by achieving 100 percent accuracy on the Unit Test.
9. Based on the content outline and Handout 2, DETERMINE THE AMOUNT OF EASE ALLOWED IN A COMMERCIAL PATTERN by completing Job Sheet 5.
10. Based on the content outline and Handout 2, MEASURE A COMMERCIAL PATTERN by completing Job Sheet 5.

MEASURING/FITTING PROBLEMS

UNIT VIII

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Provide students with Objective Sheet.

C. Discuss Unit and Specific Objectives.

D. Provide students with Information Sheet.

E. Discuss the Information Sheet.

F. Provide students with Handouts and/or Job Sheets. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

G. Integrate the following activities throughout the teaching of this unit:

1. Introduce the unit by explaining the terminology provided on the Information Sheet.
2. Discuss the type of fit found in currently popular fashions.
3. Discuss the difference between the fit of women's and men's clothing.
4. Demonstrate the method of measuring for both men and women. Provide opportunities for practice.
5. Demonstrate the method of measuring a flat pattern and comparing with a basic pattern and measurement charts on pattern envelopes to determine ease.
6. Discuss personal fit.
7. Provide examples of fitting problems and discuss solutions.
8. Provide students with several references on correct fit and detecting fitting problems.

H. Give test.

I. Evaluate test.

J. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Handouts

1. HO 1--Basic Pattern Sizes
2. HO 2--Standard Allotment for Wearing Ease

F. Job Sheets

1. JS 1--Chart Women's Measurements
2. JS 2--Chart Men's Measurements
3. JS 3--Compare Body Measurements to Pattern (Women)
4. JS 4--Compare Body Measurements to Pattern (Men)
5. JS 5--Measure a Commercial Pattern and Determine Ease Allowed

G. Unit Test

H. Answers to Unit Test

RESOURCES

(NOTE: Also see Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

A. Cy DeCosse Incorporated. The Perfect Fit. Singer Sewing Reference Library, 1987.

B. Vogue Fitting: The Book of Fitting Techniques, Adjustments, and Alterations. New York: Harper-Row, 1987.

MEASURING/FITTING PROBLEMS

UNIT VIII

INFORMATION SHEET

I. Basic pattern sizes

(Objective 1; HO 1)

A. The four basic size categories for women vary in size proportions and the types of styles included.

1. **Misses** characteristics include:
    - a. Women of slim to medium build
    - b. Women from 5' 3-1/2" to 5' 7-1/2"
    - c. Young-looking styles for the fashion-minded person
    - d. Available in even numbered sizes from 6 to 24
    - e. Longer lines from shoulder to waist
    - f. Broader lines in the shoulders, bust, and hips
    - g. Fits size B cup
2. **Junior** characteristics include:
    - a. A youthful style, basic fashion look
    - b. A figure type, not an age category
    - c. Sizes from 3-15
    - d. Slim lines
    - e. Small waist, high bust, and narrow shoulders
    - f. Fits size B cup
3. **Women's** characteristics include:
    - a. Fully developed, mature women with larger torso, lower waistline, heavier hips, broader shoulders, and heavier arms
    - b. Average to tall height
    - c. Waist and hips fuller in proportion to bust
    - d. Sizes from 38 to 50
    - e. Fits size D cup
4. **Half-size** characteristics include:
    - a. Youthful and flattering
    - b. Short from shoulder to waist
    - c. Short from waist to hem
    - d. Fuller and shorter all over
    - e. Full arms and thighs
    - f. Sizes from 12-1/2 to 52-1/2
    - g. Fits size C cup

B. Variations of the basic sizes for women

1. **Petite size** characteristics include:
    - a. Women under 5' 5" tall
    - b. Misses' shoulders
    - c. Sleeves and waistline a little shorter

        d. Waist to hem a little shorter
        e. Fuller through the middle
        f. No overpowering design features
        g. Sizes from petite 3 to petite 13
        h. Fits size C cup
    2. **Tall size** characteristics include:
        a. Misses' shoulders and sleeves
        b. Longer from shoulder to waist
        c. Longer from waist to hem
        d. Sized for women taller than 5' 8"
        e. Slim to medium build
        f. Sizes tall 10 to tall 20
    3. Sometimes sweaters and blouses are sized by name rather than number.
        a. Small: 5-7 Jr. or 8-10 Misses
        b. Medium: 9-11 Jr. or 12-14 Misses
        c. Large: 13-15 Jr. or 16-18 Misses
        d. Extra large: 20-22 Misses

C. Menswear body types and sizes

(Objective 2; HO 1)

1. Five basic body types
    a. Extra short--5' 0" to 5' 4"; 130 lbs.
    b. Short--5' 5" to 5' 7"; 145 lbs.
    c. Regular--5' 8" to 5' 10"; 175 lbs.
    d. Long--5' 11" to 6' 2"; 180 lbs.
    e. Extra-long--6' 3" to 6' 5"; 230 lbs.
2. Body type variations
    a. Stout or portly--to fit short or tall heavy-set men who weigh between 200 and 260 lbs.
    b. Athletic cut--to fit men with large chest and shoulders but small waist and hips weighing between 190 and 250 lbs.
    c. Extra, extra long--for men over 6' 5"
3. Size conventions for men's clothing
    a. **Suits and jackets**--size determined by chest measurement; 34 to 46 in standard even numbers. Some stores include odd sizes (37, 39, 41, and 43) and larger sizes (48, 50, and 52).
    b. **Slacks**--size determined by waist and inseam measurement. Waist sizes available are: 28-34 (one-inch increments), 36, 38, 40, and 42. Inseam sizes available are: 30, 32, 34, 36, 38. More expensive slacks are not pre-hemmed.
    c. **Shirts**--size determined by neck size and sleeve length or small, medium, large, and extra large.
        (1) Small--14 to 14-1/2
        (2) Medium--15 to 15-1/2
        (3) Large--16 to 17
        (4) Extra large--17-1/2 to 18
        (5) Some stores carry extra small (13-1/2) and/or medium large (16).
        (6) Sleeve lengths range from 32 to 36.

II. Guidelines for measuring a customer

(Objective 3)

A. Measure customer in undergarments which will be worn with the finished product.

B. Use a good tape measure which is easy to read.

C. Tape must be flat and not twisted.

D. Hold tape against the body with one finger under the tape.

E. Hold tape parallel to the floor on all width measurements except neckline and waistline.

F. Ask customer to stand naturally, but tall, and to wear flat shoes.

(NOTE: If high heels are to be worn with the garment, they should be worn when hem length is measured.)

G. Take each measurement twice to check accuracy.

H. Tie an elastic snugly but not tightly around the customer's waist. This will be used as a reference point for other measurements.

I. While being measured, the customer should look straight ahead and maintain a normal posture.

III. Measuring for women's garments

(Objective 4; JS 1)

A. Measurements found on commercial patterns

1. **Bust:** Measure over the fullest part of the bust. Keep tape straight and even across the back.
2. **High bust:** Measure across the top of the breast, under the arms, and across the widest part of the back. If the difference between the full bust measurement and the high bust measurement is 2" or more, use the high bust measurement for determining the pattern size.
3. **Waist:** Measure where the elastic settles. Pull tape snug but not tight.
(NOTE: An option is to measure a garment that fits comfortably when worn all day.)
4. **Hip:** Measure at the fullest part (usually 7" to 9" below waist). Mark the position with pins on the undergarments and measure the distance from the waistline, over the top of the bones, down to the pins.
5. **Back waist length:** Measure from prominent neck bone at back of neck straight down to elastic at waist.
6. **Height:** Stand in stocking feet against the wall. Place a ruler on top of the head, parallel to the floor. Mark its position on the wall and measure the distance to the floor with a tape measure or a yardstick.

B. Additional measurement areas

1. High hip: Measure 2" to 4" below the waist over the top of the hipbones.
2. Back width: Measure down from prominent neck bone 4" to 6" to center back and mark. Measure from arm crease to arm crease across back at this line.
3. Bust point: Measure from base of neck to bust point and from bust point to center front at waist. Record both measurements.
4. Shoulder: Measure from base of neck across to prominent shoulder bone.
5. Arm length: Measure, with arm slightly bent, from prominent shoulder bone to elbow, then from elbow to wrist bone. Record both measurements.
6. Arm circumference: Measure at fullest part, generally 1" below armpit.
7. Wrist: Measure around wrist and at bone. Record both measurements.
8. Neck: Measure loosely with the tape on edge.
9. Skirt length: Measure from elastic at waist center back straight down to desired hem length on leg.
10. Slack side length: Measure under waistband to desired length.

IV. Pattern sizing for men's garments

(Objective 5; JS 2)

A. Patterns for shirts with classic collars are selected by neck size.

B. Other shirt patterns are selected according to chest size.

C. Pants patterns are purchased by waist and hip (seat) size.

D. Jacket and suit patterns are sold by chest size only.

E. Casual wear, such as robes, are available in sizes small, medium, large, and extra large, corresponding to chest size.

F. Measurements on men's commercial patterns

1. Neck: Measure around the neck and add 1/2" ease.
2. Chest: Place the tape under the arms and measure around the fullest part.
3. Waist: While a man does have a definite waist, he must indicate where he likes to wear his pants. Tie a string around this point and measure the body at the string.
4. Hip (seat): Measure at the fullest part.
5. Shirt sleeve length: Bend arm up. Place tape measure at base of neck. Run tape from center back to elbow, across elbow bend, and up over the wrist bone.

G. Additional measurements needed for a customized fit

1. Vogue patterns are designed for a man of average height (5'10") corresponding to a "regular" in ready-to-wear.
2. To customize a shirt, you will need measurements for arm circumference, sleeve length, waist, and chest.
3. Pants may need adjustments for crotch length and leg length.
4. Jackets are fitted by shoulder area (as opposed to bust area on women). Adjustments may be needed in neck circumference, shoulder, arm length, and front and back length.

H. Measurement in addition to those on the pattern envelope

1. High hip: Measure at the top of the hip bones.
2. Thigh: Measure the fullest part of the thigh just under the crotch.
3. Knee: Take measurement around the leg at the knee.
4. Outseam (side length): Measure from the waist down the outside of the leg to the top of the shoe heel.
5. Inseam: Measure over pants from the crotch down the inside of the leg to the top of the shoe heel.
6. Shoulder: Measure from base of the neck to top of the arm hinge.
7. Front waist (center front) length: Measure from the base of the neck, down the center of the chest, to the string at the waist.
8. Arm circumference: Measure bicep at the fullest part and the wrist at the bone.
9. Back waist (center back) length: Measure from the base of the neck, down the center back, to the string at the waist.
10. Back width: Measure straight across the back, over the shoulder blades from arm hinge to arm hinge.
11. Crotch length: Sit erect on a hard, flat chair. With a ruler, measure from waist to chair seat.

V. Determining correct pattern size

(Objectives 6, 7; JS 3, 4)

A. Compare body measurements with those listed on the pattern envelope and select the pattern size which is most similar. When choosing pattern size, use the high bust measurement as the comparison.

(NOTE: If the full bust measurement is at least 2" larger than the high bust measurement, the pattern size is usually determined by bust or chest measurement.)

B. If measurements are quite dissimilar to pattern size, consider body contour, bone structure, and the difficulty of altering certain areas.

1. If most measurements are close to a pattern size except the hip or waist, choose that size pattern. Hips and waist are easy to alter on a blouse or dress pattern.
2. If you are making a skirt or pants, choose the pattern for the correct hip size.
3. The most difficult alterations are in the neckline area because this alteration often requires adjustments to collars.
    a. If the measured neck and shoulder areas seem small compared to other areas, consider using a pattern one size smaller from the one that is most similar to measurements.
    b. If neck and shoulder areas seem larger compared to other areas, consider a pattern one size larger.

VI. Identifying common fitting problems

(Objective 8)

A. The fit of a garment is judged on five criteria: grain, line, set of the garment, balance, and ease.

1. **Grain:** In a straight skirt or basic dress, the crosswise or lengthwise grain of the fabric should be at right angles to the floor at the center front and center back. The crosswise grain should be parallel to the floor at the bust line, chest line, and hip line. Grainline of the sleeve should also be at right angles to the floor.
2. **Line:** The shoulder seam on a basic dress should be at the top of the shoulder. The side seam should be at right angles to the floor and follow a line that runs from the tip of the ear to the ankle. When line is correct, the side seam appears to be about halfway between the front and back of the figure. Center back and center front of the garment are at those points on the body.
3. **Set:** A garment has good set if it fits smoothly over the entire body with no diagonal, vertical, or horizontal wrinkles.
4. **Balance:** The design is symmetrical on the body.
5. **Ease:** The garment's amount of looseness for movement is determined by the style of the garment. Sitting, raising arms, pulling arms forward, and bending arms should be possible with no binding of the garment.

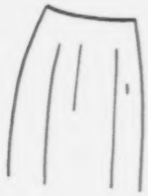
B. Evaluating fit in a garment or a pattern

1. Evaluate the five concepts.
2. Look for wrinkles, which indicate a fitting problem.
3. To train your eyes to look for evidence of poor fit, observe the fit of garments which you and others wear.
4. Each time you meet a customer, evaluate the fit of the garment the customer is wearing, as well as his/her general body structure.
5. Make mental notes as you prepare customer for measurement; discuss the fitting problems that he or she has experienced.

VII. Identifying factors which indicate fitting problems

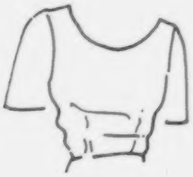
A. Vertical folds in a garment usually indicate that the garment is too wide where the fold occurs.

Remove width in the skirt.



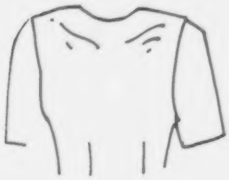
B. Horizontal folds indicate that the garment is too long.

Subtract length between bust point and waistline.



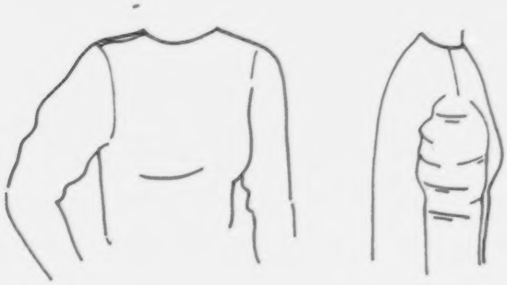
C. Diagonal folds point to the body area which is causing the fitting problem.

Increase in shoulder area.



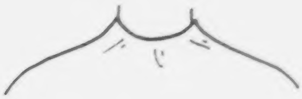
D. Wrinkles above or below tight areas, or closings that do not meet, indicate that the garment is not wide enough.

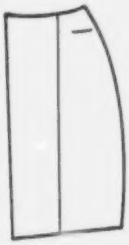
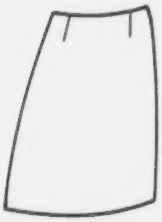
Add width to upper sleeve.



E. Construction points do not lie on the body where the pattern intended.

Lower the seamline to base of neck.



F.	Vertical grainline or seamline hangs forward or backward. 	Lift the area which caused the forward droop. In this case, the area above the derriere is too long.
G.	Hems on jacket, shirt, skirt, or pants droop or raise in one or more areas. 	Remove the extra length at the side which has the lower hip.

VIII. Wearing ease

(Objective 9; HO 2; JS 5)

A. Almost all pattern pieces will measure larger than the pattern size measurements given. The two types of ease are wearing ease and designer ease.

1. Wearing ease is the minimum fullness necessary in a garment, over and above body measurements, to allow the wearer to move comfortably.
2. Designer ease is the amount of fullness added to a garment, over and above wearing ease, to give the look that the designer intended.

B. Wearing ease is added to patterns when they are made. You do not need to add wearing ease to the body measurements.

C. The amount of ease varies with the style of the garment. Some pattern companies describe their fit in the description on the back of the pattern envelope.

D. Garments are designed with differing amounts of fullness for individual looks. Look for these terms on the pattern envelope: close fitting, semi-fitted, loose fitting, and very loose fitting.

These are more than general descriptive terms; they indicate the fit of the garment in the bust area.

E. To determine the amount of wearing ease built into a pattern, compare the measurements given for bust-chest, back waist length, waist, and hip on the pattern envelope with the actual measurement of the paper pattern.

(NOTE: Measure between the seam allowance lines and skip over any darts or tucks.)

F. The amount of difference will vary depending on the type of garment and the design ease (which is the amount of fullness required to make the design look as it was intended to look).

G. Women's sleeve length is determined by the type of sleeve. Very full sleeves require extra length for the puff. Fitted sleeves should cover the wrist bone with the arm hanging loosely.

H. Men's sleeve length is determined by the type of measurement taken.

IX. Considerations affecting wearing ease

A. Very closely fitted garments call attention to the area where the fit is tightest. The customer may look more attractive in a garment that is more loosely fitted in problem areas.

(NOTE: You can always remove some ease. It is difficult to add ease when the garment is being fitted.)

B. Very large or loosely fitted garments overpower a small figure. For this figure type it may be better to remove some ease.

C. Large figures tend to need more ease for comfort than average and smaller ones.

D. A dressy garment can fit more closely than a garment intended for work or play.

E. The fabric may determine the amount of ease required. Thick or bulky fabrics usually require more ease than flat ones. Some patterns are designed for specific fabric types (i.e., "for knits only" or "for stretch knits"). The fabric suggestions on the pattern envelope can guide you.

F. A garment designed to be close fitting may have higher armholes and a tighter bust and hip. Coats, jackets, and outerwear have much more ease. A garment which is lined will have slightly more ease than one which is unlined.

G. If the style includes enough extra fullness to make a considerable difference between the pattern envelope measurement and the actual pattern measurement, some indication will usually be printed on the pattern piece.

1. For example, the pattern piece for a very bloused bodice (often called blouson) may be 2" longer than the back waist measurement on the pattern envelope.

X. Measuring commercial patterns to determine ease allowed

(Objective 10; HO 2; JS 5)

A. To know how well the commercial pattern will fit your customer, determine the amount of ease allowed in that pattern.

1. Look for information on the pattern.
2. Measure the flat pattern and compare those measurements with the size chart on the pattern envelope.

B. Measure a commercial pattern.

1. Make sure it has no wrinkles.
   (NOTE: You can press it on a flat surface with a warm iron.)
2. Lay the pattern pieces to be measured on a flat surface.
3. With a tape measure, measure from seamline to seamline.
4. Remember to double the measurement for pieces which are only one side of the garment.
5. To get the complete measurement, measure all pattern pieces affecting the area and add the amounts together.
6. For example, to get a bust measurement, measure the bodice front and the bodice back between the seamlines and double that amount.

C. Example: A two-piece, slightly gathered skirt should be measured at the fullest part of the hip, thigh, or buttocks.

1. Determine the distance from the waistline to the fullest part of the customer's hip.
2. Measure down that distance on the pattern from the waistline seam.
3. Mark and measure across the pattern at that point from fold to seamline.
4. Double the measurement from center front to seamline.
5. Repeat process for back measurement.
6. These two measurements added together equal the circumference of the skirt at that place.
7. Check the hip measurement given on the pattern envelope.
8. The difference between those two is the amount of ease allowed in this pattern.

D. If your customer is larger than the measurement given on the pattern:

1. You must decide whether the amount of ease allowed is enough to make the completed garment comfortable and retain the look the designer intended.
2. If not, you must decide how much to increase the width of the pattern.

E. The first time you use a commercial pattern for a customer, measure the pattern.

1. If the customer's measurements are very close to the pattern envelope measurements and you are familiar with the fit a customer desires, you will probably not have to measure the pattern each time you sew for that customer.
2. If the garment you are making is a different style from what you normally make for that customer, you may want to measure the pattern.

MEASURING/FITTING PROBLEMS

UNIT VIII

HANDOUT 1--BASIC PATTERN SIZES

MISSES SIZES

Size	6	8	10	12	14	16	18	20	22	24
Bust	30-1/2	31-1/2	32-1/2	34	36	38	40	42	44	46
Waist	23	24	25	26-1/2	28	30	32	34	37	39
Hip	32-1/2	33-1/2	34-1/2	36	38	40	42	44	46	48
Back wst. lgth.	15-1/2	15-3/4	16	16-1/4	16-1/2	16-3/4	17	17-1/4	17-3/8	17-1/2

WOMEN'S SIZES

Size	38	40	42	44	46	48	50
Bust	42	44	46	48	50	52	54
Waist	35	37	39	41-1/2	44	46-1/2	49
Hip	44	46	48	50	52	54	56
Back wst. lgth.	17-1/4	17-3/8	17-1/2	17-5/8	17-3/4	17-7/8	18

MEN'S SIZES

Size	**34**	**36**	**38**	**40**	**42**	**44**	**46**	**48**
Chest	34	36	38	40	42	44	46	48
Waist	28	30	32	34	36	39	42	44
Hip (seat)	35	37	39	41	43	45	47	49
Neck band	14	14-1/2	15	15-1/2	16	16-1/2	17	17-1/2
Shirt sleeve	32	32	33	34	34	34	35	35

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MEASURING/FITTING PROBLEMS

UNIT VIII

HANDOUT 2--STANDARD ALLOTMENT FOR WEARING EASE

	Misses	Men's	Half-size	Women's
Bust/chest	3"	3-1/2"	3-1/2"	3-1/2"
Waist	1/2"	1"	1"	1"
Hip	2"	2"	2-1/2"	2-3/4"
Upper arm	(9" below)	(Fullest part)	(7" below)	(9" below)
Elbow	2" to 2-1/2"	2" to 2-1/2"	2" to 2-1/6"	2" to 2-1/2"
Wrist	1"	1"	1"	1"
Neck	1/2"	1/2"	1/2"	1/2"
Back waist length	1/2"	1/2"	1/2"	1/2"
Crotch length	1/2-2"	1/2-2"	1/2-2"	1/2-2"

MEASURING/FITTING PROBLEMS

UNIT VIII

JOB SHEET 1--CHART WOMEN'S MEASUREMENTS

Materials and equipment:

Measuring tape

Steps of procedure:

1. Measure customer.
2. Chart measurements below.

Customer's name____

Date__________ Height__________

Bust (around fullest part)__________ High bust__________

Waist________ High hip__________ (2-4") Full hip__________ (7-9")

Back waist length__________

Shoulder__________

Arm length (total)__________

   a. Shoulder to elbow__________

   b. Elbow to wrist bone__________

Arm circumference__________

Skirt length__________ Slack side length__________

MEASURING/FITTING PROBLEMS

UNIT VIII

JOB SHEET 2--CHART MEN'S MEASUREMENTS

Materials and equipment:

Measuring tape

Steps of procedure:

1. Measure customer.
2. Chart measurements below.

Customer's Name____

Date__________ Height____________

Chest_____________ Neck_____________

Waist_____________ Hip______________

Shirt sleeve length____________ Shoulder___________

Back waist length____________ Front waist length____________

Inseam length_______________ Outseam length__________

MEASURING/FITTING PROBLEMS

UNIT VIII

JOB SHEET 3--COMPARE BODY MEASUREMENTS TO PATTERN (WOMEN)

Materials and equipment:

Measuring tape
Commercial pattern
Job Sheet 1

Steps of procedure:

1. Chart body measurements from Job Sheet 1.

2. Measure pattern and chart measurements.

3. Compare body and pattern measurements for adjustments, if any.

	Body Measurement	Pattern Measurement	Adjustments (+ or -)
Bust			
High bust			
Waist			
High hip (2-4")			
Full hip (7-9")			
Back waist length			
Shoulder			
Arm length			
a. Shoulder to elbow			
b. Elbow to wrist bone			
Arm circumference			
Skirt length			
Slack side length			

MEASURING/FITTING PROBLEMS

UNIT VIII

JOB SHEET 4--COMPARE BODY MEASUREMENTS TO PATTERN (MEN)

Materials and equipment:

Measuring tape
Commercial pattern
Job Sheet 2

Steps of procedure:

1. Chart body measurements from Job Sheet 2.

2. Measure pattern and chart measurements.

3. Compare body and pattern measurements for adjustments, if any.

	Body Measurement	**Pattern Measurement**	**Adjustments (+ or -)**
Chest			
Waist			
Hip			
Shirt sleeve length			
Outseam			
Inseam			
Neck			
Shoulder			
Front waist length			
Back waist length			

MEASURING/FITTING PROBLEMS

UNIT VIII

JOB SHEET 5--MEASURE A COMMERCIAL PATTERN AND DETERMINE EASE ALLOWED

Materials and equipment:

Commercial pattern
Tape measure
Pattern envelope back
Handout 2--Standard allotment for wearing ease

Steps of procedure:

1. Cut out and press pattern pieces.

2. Measure **bust-chest.** Place tape measure across pattern for front below arm hole. Measure area between seam allowances.

3. Repeat on pattern back piece.

4. Add two measurements together and double.

5. Find bust-chest measurement for the pattern size on the pattern envelope back. Subtract that number from your pattern measurement. That number is the amount of ease allowed in the pattern.

6. Compare the answer to the ease chart on HO 2.

    a. If your answer is less than the required wearing ease, choose a different pattern, use a larger size pattern, or alter the pattern to allow more ease.

    b. If your answer is more than the required wearing ease, the difference is the **fashion ease** allowed by the designer. You may leave this alone, add additional ease, or subtract some ease, depending on the measurements of the body you are fitting.

7. Measure **hip.** Place tape measure across pattern for front skirt or pants at widest part. Measure area between seam allowances.

8. Repeat on pattern back piece.

9. Add two measurements together and double.

10. Find hip measurement for the pattern size on the pattern envelope back. Subtract that number from your pattern measurement. That number is the amount of ease allowed in the pattern.

11. Compare the answer to HO 2.

    a. If your answer is less that the required wearing ease, choose a different pattern, use a larger size pattern, or alter the pattern to allow more ease.

    b. If your answer is more than the required wearing ease, the difference is the **fashion ease** allowed by the designer. You may leave this alone, add additional ease, or subtract some ease, depending on the measurements of the body you are fitting.

12. Measure for **waist.** Place tape measure across pattern for skirt or pants front below at waist line. Measure area between seam allowances.

13. Repeat on pattern back.

14. Add two measurements together and double.

15. Find waist measurement for the pattern size on the pattern envelope back. Subtract that number from your pattern measurement. That number is the amount of ease allowed in the pattern.

16. Compare the answer to HO 2. If your answer is less than the required wearing ease, choose a different pattern, use a larger size pattern, or alter the pattern to allow more ease.

MEASURING/FITTING PROBLEMS

UNIT VIII TEST

Part I--Multiple Choice: For each multiple choice question, choose the best answer and write its letter in the space provided.

___ 1. Which pattern size category is designed for women with small waists, high busts, and narrow shoulders?

a. Junior
b. Misses
c. Women's
d. Half-sizes

___ 2. Which menswear size is appropriate for a man 6' 1" tall?

a. Short
b. Regular
c. Long
d. Extra long

___ 3. Which measurement is used to determine a man's jacket size?

a. Neck size
b. Sleeve length
c. Height
d. Chest

___ 4. A fully developed female of average height would most likely wear what size?

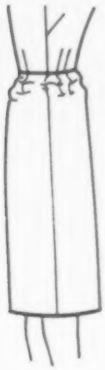
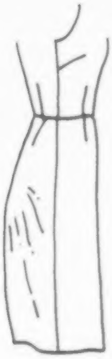
a. Women's 38
b. Half-size 14 1/2
c. Misses 12
d. Tall 18

___ 5. Which statement is true when measuring a customer?

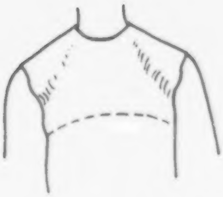
a. Tape must be flat and not twisted.
b. Take each measurement twice to check accuracy.
c. Have customer maintain a normal posture.
d. All of the above

Part II--Short Answer: Read the fitting problem illustrated in the left and middle columns and provide a possible solution in the right-hand column.

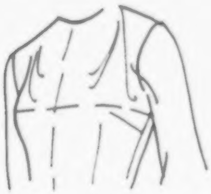
Example:

	Problem	Solution
	Skirt too tight through hips	Provide more fullness at hips.
	6. Side seams swing forward	

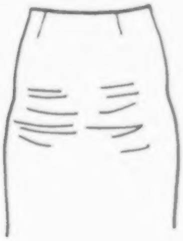
7. Sloping shoulders or wide neck base



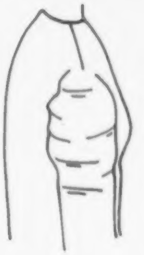
8. Narrow chest



9. Vertical folds in skirt



10. Large upper arm



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MEASURING/FITTING PROBLEMS

ANSWERS TO UNIT VIII TEST

Part I

1. a
2. c
3. d
4. a
5. d

Part II

6. Raise back of garment; adjust hem.
7. Adjust shoulder seam.
8. Decrease bodice front width.
9. Remove width in skirt.
10. Add width to upper sleeve.

Custom Sewing

Altering Ready-Made Products
Unit IX

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1			1			
-	2			2			
C1	3				1		
C2	4				2		
C3	5				3		
C4	6				4		
C5, C6	7				5		
C7	8				6		
C7	9				6		
C8	10				7		
C8	11				8		
C9	12				9		
C10	13				10		
C11	14				11		
C13	15				12		
C14	16				13		
C16	17				14		
C17	18				15		

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Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
C18	19				16		
C19	20				17		

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

ALTERING READY-MADE PRODUCTS

UNIT IX

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to alter ready-made garments or products without distorting the original design and grainlines. Competencies will be demonstrated by correctly performing the procedures outlined in the Assignment and Job Sheets.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Based on the content outline, MATCH THE TERMS AND DEFINITIONS RELATED TO ALTERING GARMENTS by completing Assignment Sheet 1.
2. Based on the content outline, RECORD REQUESTED ALTERATIONS AND ESTIMATE TIME AND COST by completing Assignment Sheet 2.
3. Based on the content outline, ADD OR ELIMINATE SEAMS by completing Job Sheet 1.
4. Based on the content outline, ADD OR ELIMINATE CUFFS ON PANTS AND SLEEVE PATTERNS by completing Job Sheet 2.
5. Based on the content outline, CHANGE COLLAR AND LAPELS by completing Job Sheet 3.
6. Based on the content outline, SHORTEN OR LENGTHEN COLLAR by completing Job Sheet 4.
7. Based on the content outline, ADD OR ELIMINATE YOKES AND PLEATS by completing Job Sheet 5.
8. Based on the content outline, ELIMINATE FLAIR FROM PANTS OR SKIRTS by completing Job Sheet 6.
9. Based on the content outline, ADD FLAIR TO A SKIRT PATTERN by completing Job Sheet 6.
10. Based on the content outline, CHANGE DARTS IN PATTERN by completing Job Sheet 7.
11. Based on the content outline, CHANGE LOCATION OF DARTS IN READY-MADE GARMENTS by completing Job Sheet 8.
12. Based on the content outline, CHANGE LOCATION OF FASTENERS by completing Job Sheet 9.
13. Based on the content outline, CHANGE TYPES OF FASTENERS USED by completing Job Sheet 10.

14. Based on the content outline, CHANGE, ADD, OR REMOVE POCKETS by completing Job Sheet 11.

15. Based on the content outline, MAKE A PATTERN FOR A FACING by completing Job Sheet 12.

16. Based on the content outline, MAKE A PATTERN FOR A LINING by completing Job Sheet 13.

17. Based on the content outline, ADJUST THE WIDTH OF A GARMENT by completing Job Sheet 14.

18. Based on the content outline, LENGTHEN A GARMENT by completing Job Sheet 15.

19. Based on the content outline, SHORTEN A GARMENT by completing Job Sheet 16.

20. Based on the content outline, REWEAVE HOLE IN GARMENT by completing Job Sheet 17.

ALTERING READY-MADE PRODUCTS

UNIT IX

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Provide students with Objective Sheet.

C. Discuss Unit and Specific Objectives.

D. Provide students with Information Sheet.

E. Discuss the Information Sheet.

F. Provide students with Assignment and/or Job Sheets. Assignment Sheet 1 may be used as part of a Unit Test, if desired. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

G. Integrate the following activities throughout the teaching of this unit:

1. Introduce the unit by explaining the terminology provided on the Information Sheet.
2. For altering patterns:
    a. Make quarter-scale patterns of circular skirts, shirts with yokes, sleeves with flair or other patterns on which you feel your students could successfully change the design.
    b. Collect commercial patterns which can be altered and discuss with students how to determine what changes can be made successfully.
    c. Discuss the need for pattern changes, better fit, adding originality to a garment/product, and developing creativity in the student.
    d. Have students add a section on pattern alterations to their notebooks. They should use quarter scale patterns and record the steps required and the directions for each step.
    e. Invite an alterations person to visit the class. Ask him/her to demonstrate alteration techniques and discuss good use of time and pricing work.
3. Have students make a garment for some person who has fitting problems--perhaps a mother or grandmother.
4. For altering ready-made clothing:
    a. Provide students with samples of ready-made garments and discuss the characteristics of garments which affect the possibility of alterations.
    b. Demonstrate correct methods of ripping and pressing.
    c. Demonstrate the methods for changing jacket lapels.
    d. Invite a professional to demonstrate reweaving.
    e. Visit a store or cleaners and ask a professional to demonstrate and discuss alterations.
    f. Provide opportunities for students to do hem alterations on ready-made garments.

(NOTE: Show examples when possible.)

H. Reteach if necessary.

CONTENT OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Assignment Sheets

   1. AS 1--Match Terms and Definitions
   2. AS 2--Recording Alterations

F. Answers to Assignment Sheets

G. Job Sheets

   1. JS 1--Add/Eliminate Seams
   2. JS 2--Add/Eliminate Cuffs on Pants and Sleeve Patterns
   3. JS 3--Change Jacket Collar and Lapels
   4. JS 4--Shorten/Lengthen Collar
   5. JS 5--Add/Eliminate Yoke on Pattern
   6. JS 6--Add and Remove Flair from Pants and Skirts
   7. JS 7--Change Darts in Pattern
   8. JS 8--Change Location of Darts in Ready-Made Garments
   9. JS 9--Change Location of Buttons
   10. JS 10--Change Type of Fasteners Used
   11. JS 11--Change, Add, or Remove Pockets
   12. JS 12--Make Facing Pattern
   13. JS 13--Make Lining Pattern for Jacket or Coat
   14. JS 14--Increase and Decrease the Width of Garments
   15. JS 15--Lengthen Garments
   16. JS 16--Shorten Garments
   17. JS 17--Reweave Hole in Garment/Product

RESOURCES

(NOTE: See Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

A. Owen, Alma. Home-Based Business: Pricing Your Work (MP 598). University of Missouri-Columbia: University Extension, 1991.

ALTERING READY-MADE PRODUCTS

UNIT IX

INFORMATION SHEET

I. Terms and definitions

(Objective 1; AS 1)

A. Facing--a piece of fabric, fitted or bias, applied to finish the edges of necklines, armholes, and other openings in a garment

B. Fasteners--any notions used to close a garment (zippers, hooks and eyes, snaps, etc.)

C. Flair--fullness at the bottom of a skirt, trousers, shirt, jacket, or a sleeve. The part of a garment that spreads out and widens at its lower edge.

D. Inset--a piece of fabric or trim placed into the garment by cutting an opening and seaming the garment and inset together; a piece of fabric that has been inserted into a garment for better fit or decoration

E. Reweaving--restoring a woven fabric to its original design by hand sewing threads back into place; repairing a snag or tear in a woven fabric

F. Roll line--the line on which a lapel or collar turns back on itself in a garment; markings sometimes found on a pattern indicating the area along which the collar and lapel are turned back

G. Yoke--a piece of fabric added to the top front or back, or both, of blouses and skirts; adds design, fitting, and strength

II. Altering patterns for design changes

(Objective 2; AS 2)

A. The customer may request that you not only create a garment or product from a particular pattern, but also that you make changes to the pattern.

B. You must determine whether the requested changes are possible on the pattern desired.

C. You must also determine whether the requested changes are reasonable.

1. How much time and effort will the changes make?
2. Will the customer be willing to pay for the time the changes will take?
3. Can the same effect be accomplished by changing to another pattern?
4. Will the changes look good with the rest of the pattern design?

D. Some changes can be made more easily by substituting or adding a piece from another pattern.

1. The piece must be compatible with the original pattern.
2. The piece must be the same size as the original pattern.
3. The piece should be from the same pattern company as the original pattern.
4. Check particularly the armhole sizes, the placement of the shoulder seams, the grainlines, and the waistline treatment.

III. Altering ready-made garments

A. Before agreeing to make alterations to a ready-made garment, carefully consider whether the alteration requested will work and whether it will be worth the time and effort.

B. Estimate the time required to make the adjustments so that you can charge the customer appropriately.

C. Estimate the supplies needed--thread, seam or hem tape, zippers, etc.

D. Give the customer an estimate of the cost and let him/her decide whether the garment is worth it.

E. Determine what alterations are required.

1. Have the customer try on the garment wearing appropriate undergarments and shoes.
2. Place the customer in front of a full-length mirror and discuss possible alterations to achieve the fit desired.
3. Mark the alterations with pins or tailor's chalk.
4. Check the inside of the garment to determine the amount that can be let out or taken in, and the number of seams, darts, zippers, etc., which must be removed and redone.
5. Record the requested alterations, estimated time, and cost. Remember that you are in business to make a profit. You must charge enough to pay yourself a wage per hour as well as cover your cost for supplies.
6. Have the customer sign the record of the alterations and give him/her a copy of it.
7. If the alterations are extensive, you may wish to schedule another fitting.
8. You may request a deposit, especially if you must buy special supplies (for example, a silk lining fabric or leather buttons). This will cover your costs even if the customer does not come back to pick up the garment.

IV. Adding and eliminating seams in pattern

(Objective 3; JS 1)

A. Add seam

1. Draw new seamline and cut along the line.
2. Add seam allowances to both pieces. Tape seam allowance onto pieces or draw new pieces.

B. Eliminate seam from pattern

1. Matching seamlines, pin the tissue copies together.
2. Tape the seams together or draw a new pattern piece.

V. Adding and eliminating cuffs

(Objective 4; JS 2)

A. Adding cuffs on pants patterns

1. Determine the size of the cuff to be added.
2. Tape a piece of tissue paper to the bottom of the pattern piece.
3. Measure from the hemline down the distance of the finished cuff. ***(See Line A on Fig. 9-1.)***
4. Add the distance of the finished cuff again. ***(See Line B.)***
5. Add the amount for the hem (slightly less than the depth of the finished cuff).

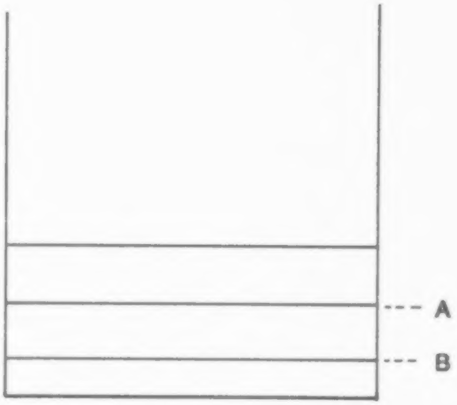


FIG. 9-1

B. Eliminating cuffs on pants patterns

1. Find the cuff foldline on the pattern.
2. Use this line as the hemline.
3. Add the amount for the hem (check that the length is correct).
4. Cut off the pattern at this line.

C. Adding cuff on sleeve pattern

1. Determine the finished width of the cuff to be added.
    a. Width should be appropriate for the style of the garment.
    b. Length of cuff is the wrist measurement, plus ease of about 1".
2. Add seam allowance to measurement on two short ends and one long side. (The long side that does not have a seam allowance added is placed on the fold of the fabric.)
3. Cut pattern for cuff out of tissue paper or pattern fabric.
4. Tape tissue paper to the bottom of the sleeve pattern piece.
5. Sleeve may be shortened by the width of the cuff or length may be kept the same and sleeve allowed to puff.
6. On the bottom of the sleeve, cut off hem allowance, leaving 5/8" for seam allowance and amount needed for ease.
7. Add to width of sleeve (if necessary for gathering into cuff) and make a placket.

D. Eliminating cuff on sleeve pattern

1. Tape tissue paper to the bottom of the sleeve pattern piece.
2. Take out some fullness from sleeve if desired.
3. Measure cuff pattern width (from stitching line to fold line) and add that amount to length of sleeve pattern piece.
4. Add hem allowance to end of sleeve pattern piece.

VI. Changing collar and lapels on a jacket

(Objective 5; JS 3)

A. Evaluate the alteration job in terms of the overall appearance of the garment. Will the change in the size of the lapel work with rest of the garment?

B. Mark the new line on the lapel with chalk.

C. Baste through all thicknesses of the lapel just beyond the jacket roll line.

D. Open the facing seam from collar to bottom of roll line and remove the tape from the outer edge of the lapel.

E. Mark the new lapel line on the canvas interfacing. Trim the canvas interfacing, but not the garment fabric on the new lapel line.

F. Baste pre-shrunk cotton twill tape along the lapel. Allow the tape to extend into the seam allowance about 1/16". Slipstitch along both edges of the tape, stitching through the underside of the lapel with small stitches.

G. Trim the facing to 3/8". Fold the facing seam allowance under, but allow it to extend about 1/16" beyond the facing. Baste in place.

H. Slipstitch along the facing edge, making very small invisible stitches.

I. If the lapel has been trimmed so much that the collar is too wide, make the same adjustments at the edge of the collar, tapering to nothing at the edge of the lapel roll line.

VII. Shortening/lengthening collar

(Objective 6; JS 4)

A. Determine the size and shape of the new collar.

B. If the collar is to be lengthened, tape a piece of tissue to the back of the pattern piece.

C. Without changing the neckline edge, draw new side and outside edge lines as desired.

D. Add seam allowance.

VIII. Adding/eliminating yokes, gathers, and pleats to a pattern *(See Fig. 9-2.)*

(Objective 7; JS 5)

A. Adding a yoke

1. Determine the position and shape of the yoke seam.
2. Draw the new seamline on the traced design.
3. Cut the pattern apart on the new seamline.

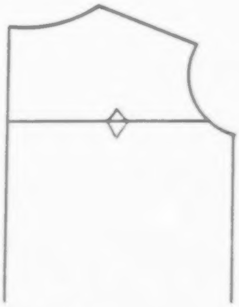


FIG. 9-2

4. Add seam allowance seam to the yoke piece.
5. Add about 1/4" to the shirt back or front at the armhole edge for ease. Taper to the original armhole at the sleeve notches.

B. Adding a yoke and gathers or pleats *(See Fig. 9-3.)*

1. Determine the position and shape of the yoke seam.
2. Draw the new seamline on the traced design.
3. Cut the pattern apart on the new seamline.
4. Cut the shirt back or front apart lengthwise and spread on a new piece of tissue. The areas between the pattern pieces are the pleats or will be gathered into the new back.
5. Mark the pleat fold lines or gathering area.
6. Add the seam allowance at the top of the back. Curve it slightly above the pleat area for ease in wearing.
7. It may be desirable to slightly decrease the shoulder seam at the armhole for a better fit.

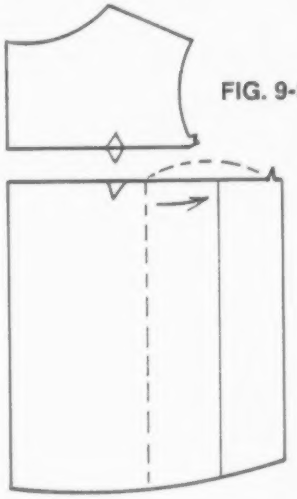


FIG. 9-3

C. Eliminating a yoke

1. Pin the two pattern pieces together on the seamlines.
2. If there are pleats or gathers in the pattern, fold them out.
3. Trim the shoulder seam about 1/4" at the armhole edge.

IX. Removing flair from pants and skirts

(Objective 8; JS 6)

A. Pants and skirts *(See Fig. 9-4 and 9-5.)*

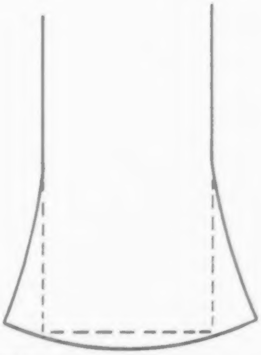


FIG. 9-4

1. Take out the hem before removing flair.
2. In pant legs, the flair is usually removed at the side seams. The same amount is removed from both seams.
3. Straighten the hemline and replace the hem.
4. In a skirt, the flair is removed by changing the side seams or by changing several seams.
5. If necessary, reshape the hemline. Replace the hem.

B. Skirt pattern

1. Determine the amount of flair to be removed from the hemline.
2. Divide that amount by the number of pattern pieces in the skirt. Remove flair equally or proportionally from all pattern pieces involved.
3. The flair should not be removed at the lengthwise grain line. As flair is removed, the seam of the skirt will move toward the lengthwise grainline.

4. Draw a straight line on the pattern copy at the point where the flair will be removed. *(See Figs. 9-6, 9-7, and 9-8.)*
5. Cut the pattern apart on that line.
6. Lap the pattern to remove desired amount of flair. Do not lap the waistline. Do not reduce the hipline too much.
7. Tape the pieces together and redraw the hemline.
8. Repeat the procedure for the rest of the pattern pieces.

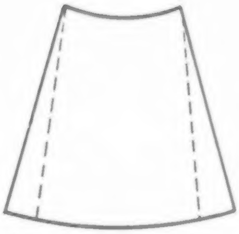


FIG. 9-5

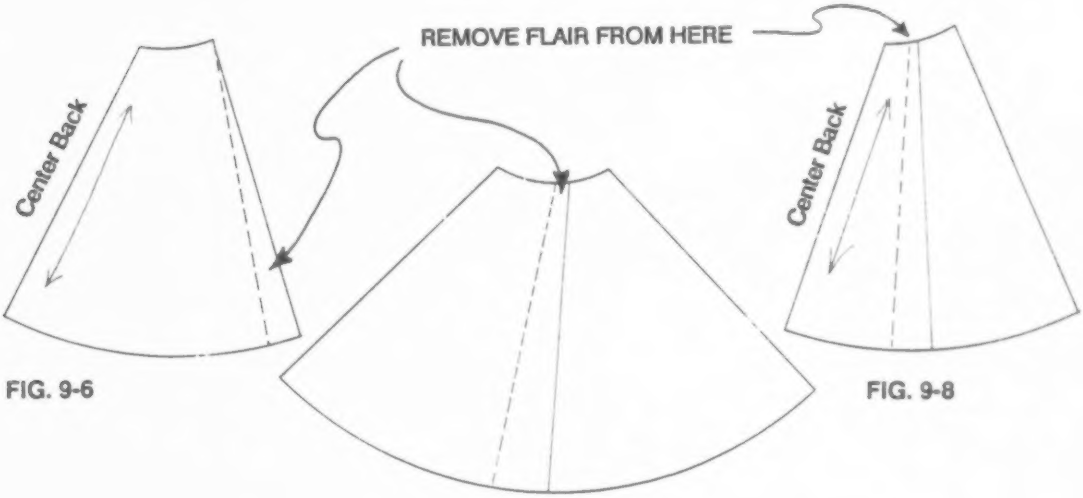


FIG. 9-6

FIG. 9-8

FIG. 9-7

X. Adding flair to a skirt pattern *(See Fig. 9-9.)*

(Objective 9; JS 6)

A. Draw a line or lines where flair should be added.

B. Cut pattern on these lines from hem to waistline. Do not cut all the way through the top of the pattern piece.

C. Spread on the cut lines and tape tissue before the pattern.

D. Straighten the hem.

XI. Changing darts

(Objective 10; JS 7)

A. Changing location of darts in pattern pieces

1. Establish the dart line by finding the bust point. *(See Figs. 9-10 and 9-11.)*
2. Cut out the old dart.

3. Measure the distance the dart is to be lowered.
4. Plot that distance from the top seam line of the old dart and make the top seam line of the new dart parallel to it.
5. Tape the old dart in the new position.
6. Fill in the space from the old dart with tissue paper.
7. Draw a new seam allowance line over the old dart area.

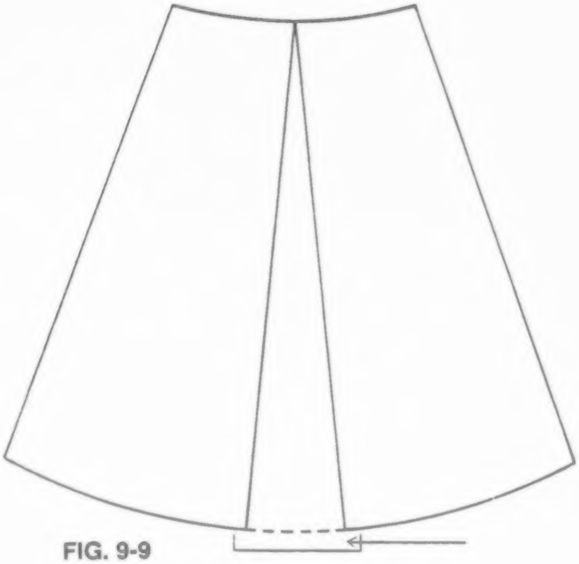


FIG. 9-9

B. Changing from one large dart to two smaller ones (generally done to skirts) in pattern pieces *(See Figs. 9-12 and 9-13.)*

1. Measure the width of the large dart and divide that amount in half.
2. This is the width of the new darts.
3. Plot the position of the new darts. There should be some distance between them so that they are attractive and will release the fullness where required.

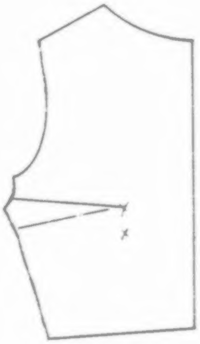


FIG. 9-10

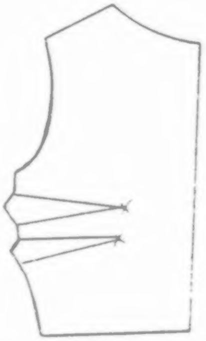


FIG. 9-11

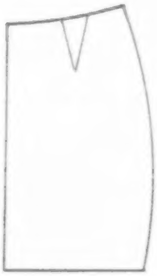


FIG. 9-12

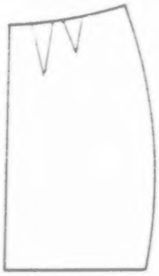


FIG. 9-13

XII. Changing location of darts in ready-made garments

(Objective 11; JS 8)

A. If the dart has not been cut, the position, width, length, or shape of the dart can be changed.

B. The dart should release fullness at the point of the bust or at the fullest part of a rounded area of the body.

C. To change bust line darts

    1. Determine the new point of the dart.
       (NOTE: Bust line darts should point to the bust and end about 1/2" to 1" from the bust point.)
    2. Release the garment seam which covers the dart and take out the dart stitching. Press.
    3. Move a side bust dart up or down to position it correctly.
    4. Move a waistline dart toward or away from the center.
    5. Make the dart narrower or straighter to change the fit.

D. To change shoulder darts

    1. Some figures require a dart at the neckline instead of at the shoulder area.
    2. Take out the shoulder seam and take off the neckline finish.
    3. Take out the stitching holding the darts in the shoulder seams.
    4. Put new darts into the neckline.
    5. Recut the neckline edge so the collar or facing will fit back on it.

E. To change neckline by adding darts, use the following procedure when neckline is too large or there is a horizontal fold at the back of the collar. Use this in the front when there is bagginess between the bust line and the neckline area.

    1. Remove the collar and take out the shoulder seams.
    2. Recut the neckline, making it lower. This will increase the size of the neckline. If necessary, recut the shoulder line also.
    3. Add darts to take up the extra width.
    4. Restitch shoulder seam and replace collar.

XIII. Changing location of fasteners on the pattern

(Objective 12; JS 9)

A. When a pattern is lengthened or shortened, the position of the fasteners must also be changed.

B. If the pattern is lengthened, it may be necessary to add an additional fastener and to alter the distance between them.

C. If the pattern is shortened, it may be necessary to omit one fastener and change the distance between the remaining ones.

D. To determine the position for buttons and fasteners, see Module 2, Unit V--Applying Fasteners.

XIV. Changing type of fastener used in the pattern

(Objective 13; JS 10)

A. Change from buttons to a zipper.

    1. Mark a seam allowance on both sides of the center back or center front line.
    2. Cut off the pattern on that line.

B. Change from a zipper to buttons.

1. Determine the position of the buttons near the bust, waist, and hips (the points of greatest strain). Cut paper circles and lay them on the pattern to help determine the number of buttons needed and the space between them.
2. Draw an extension beyond the center line equal to the full width of the button or 1/2" to 1" more.
3. Draw the facing wide enough to cover the entire area of the extension plus the buttonhole length, plus enough extra to make the buttonhole sturdy.
4. Add an additional 1/4" for finishing the edge on the facing.

XV. Changing, adding, or removing pockets

(Objective 14; JS 11)

A. Determine whether the addition or removal of a pocket will alter the line of the garment or detract from the design.

B. Add a patch pocket.

1. Make a pattern the size and shape of the finished pocket.
2. Move the pocket shape around on the pattern until you locate a placement that is suitable to the design and allows access for putting a hand or small object into it. Make sure the pocket does not interfere with seams, fasteners, closings, hems, or darts.
3. Make the pocket. (Be sure to add a seam allowance and top facing to the shape you have cut out.)
4. Sew the pocket in place following the directions in Module 2, Unit IV--Clothing Construction.

C. Eliminate a set-in pocket.

1. Determine which, if any, seams or facing will be eliminated when the pocket is removed.
2. Hold the seams together to be sure that they do not interfere with any darts or other detailing.
3. Cut out the skirt, eliminating the extension that was intended for attaching the pocket.

XVI. Making facing pattern

(Objective 15; JS 12)

A. Facings support and finish edges.

B. Facings are usually cut on the same grainline as the regular pattern piece, but slightly smaller.

C. Place the pattern for the piece to be faced on a piece of tissue paper.

D. Place a piece of carbon paper between them.

E. Draw a free-hand curve for the finished edge of the facing. Facings are usually 2-1/2" wide at the shoulder seam and may be wider at the center back or front.

F. Cut out the new pattern and remove 1/8" from the shoulder seam edge to make it a better fit.

G. Repeat the procedure for additional facings needed.

XVII. Making lining pattern

(Objective 16; JS 13)

A. Lining patterns are made from the pattern pieces. The lining pattern for a dress or skirt is usually 1" shorter than the garment.

B. Coat and jacket linings are cut so they attach to the facings in the front and have extra ease in the center back.

1. Cut the entire front pattern from tissue paper.
2. Draw the facing pattern line on the tissue.

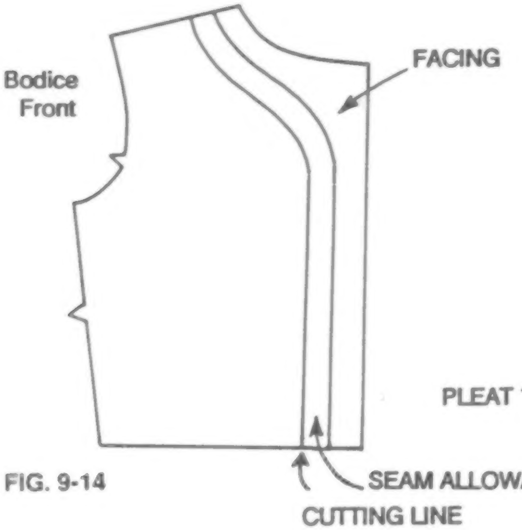


FIG. 9-14

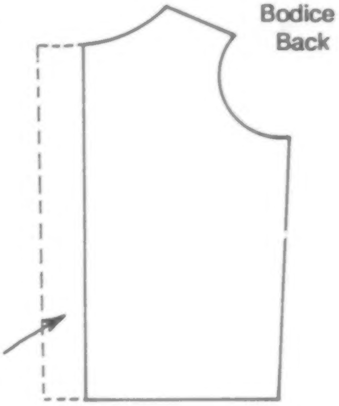


FIG. 9-15

3. Cut the pattern on the line and add seam allowance to the facing and the lining *(See Fig. 9-14.)*
4. Cut the entire back pattern from tissue.
5. Add 2" to 3" at the fold line (center back) for pleat. *(See Fig. 9-15.)*
6. Tape together or redraw pattern.

XVIII. Adjusting widths of garments or products

(Objective 17; JS 14)

A. Increasing the width of garments or products

1. Many garments have narrow seams which do not give enough width to change the fit. However, most ready-to-wear garments have enough fabric to allow the seam to be moved over 1/4", giving an extra 1/2" of width.
2. Adjust darts.
   a. Take out the dart and resew it, enclosing less fabric.

   - b. The width will be increased by twice the amount of the difference between the size of the old dart and the new dart.

3. Adjust tucks and pleats.
   - a. All pleats or tucks must be adjusted by the same amount.
     - (1) Take out all pleats or tucks.
     - (2) Measure and pin each pleat or dart, reducing the size of each by a small amount.
     - (3) Reconstruct garment.
   - b. If there are many pleats or tucks in the garment, this procedure may be more trouble and work than it is worth.
4. Width may be added by placing an inset in the side seam.
   - a. A one-piece inset is added at the side seam and the sleeve seam.
   - b. Determine whether an inset piece will work with the style of the garment.
   - c. Fabric for an inset must match.
   - d. The amount of increase is determined by the type and size of the inset used. ***(See Figs. 9-16 and 9-17.)***
     - (1) Figure 9-16 shows an inset that gives more width at the armhole and bust line.
     - (2) Figure 9-17 shows an inset that gives more width at the sleeve hem and the waistline.
   - e. Take out the stitching at the sleeve and side seam and insert the inset with the point of the inset matching the underarm seam.
   - f. Hem the inset at the sleeve.
   - g. Figure 9-17 requires an additional adjustment in the shirt. The shirt could be gathered, tucked, or pleated. To make different styles, vary the size of the pleats.

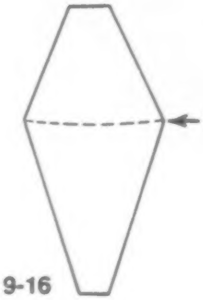


FIG. 9-16

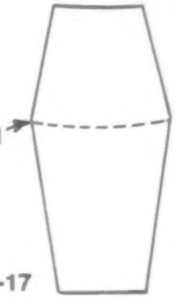


FIG. 9-17

B. Decreasing the width of garments or products

1. Adjust the seams.
   - a. Take out waistband or hems.
   - b. Sew new seam line. Do not make seams so large that you change the position of darts, tucks, or pleats.
   - c. Resew waistband and/or hems.
2. Adjust darts.
   - a. Take out seams or waistband so that you can get to the dart.
   - b. Take out dart stitching.
   - c. Resew darts, making darts larger. Width will decrease by twice the amount of the increase in dart size.
     (NOTE: When a dart is made wider there is a tendency to make it longer also. Be sure that you do not release fullness where it is not required.)
   - d. Resew waistband and/or seams.

XIX. Adjusting garments or products to make them longer

(Objective 18; JS 15)

A. Make the hem longer.

1. Determine whether there is enough fabric in the hem to lengthen the skirt.
2. If there is not enough, the hem may be faced. Use a bias facing or hem tape or cut your own bias facing. (See instructions in Unit VI--Trims and Finishes.)
3. Remove the original hem. Save the thread if possible, especially if the color will be difficult to match.
4. Press the hem area to remove the old crease line. A trick for making the old hemline less noticeable is to place the hem stitches for the new hem in the old crease line.
5. Mark the new fold line.
6. Attach the new hem finish, being careful not to stretch the bias, lace, or the garment.
7. Hem the garment with a suitable stitch, by hand or by machine, depending on the garment and type of fabric.
8. If the old hem line still shows after the garment has been washed, it may sometimes be covered by a line of trim.
   a. In a casual or child's garment, rickrack, decorative ribbon, or a line of decorative machine stitches will usually give the garment a new look.
   b. In a dressing garment, a line of lace trim may cover the line and be attractive.

B. Lengthen the sleeves.

1. A jacket sleeve with a lining must have enough fabric to make the sleeve longer, or you can use a separate piece of fabric which matches the jacket. The lining fabric must also be long enough to cover the new sleeve hem.
2. If the jacket sleeve has a vent, it is seldom possible to lengthen the sleeve.
3. Remove the original sleeve hem and the interfacing, unless the new hem can be turned at a point where the old interfacing will still be effective. Press the interfacing and insert it at the proper place.
4. Press the sleeve, interfacing, and lining.
5. Hem the sleeve against the interfacing.
6. Hem the lining in place.

C. Lengthen the bodice of the dress.

1. Determine whether there is enough fabric in the waistline seam to lengthen the garment.
2. If not, it may be possible to cut some fabric out of the hem for an inset (if the waistline will be covered by a belt).
3. If the dress has a self belt, it may be possible to make a band from the belt fabric.
4. If fabric is inserted to make the bodice longer, the seams should be finished or covered by a facing.

D. Lengthen trousers.

1. If the trousers do not have a cuff, lengthen them as you would a skirt.
2. A false cuff may be substituted if there is not enough fabric to lengthen the trousers and make a new cuff.
   a. Remove the cuff and press the crease lines.

        b. Determine the new hemline and mark.
        c. Mark length of the cuff.
        d. See Unit IV--Construction Techniques for making a cuff.

XX. Adjusting garments to make them shorter

(Objective 19; JS 16)

A. Determine where the garment should be shortened to maintain correct proportions. For example, if a skirt has a band of trim near the bottom, it may be necessary to shorten the skirt above and below the band.

B. To shorten the skirt.

1. Remove the old hem and seam tape, if any.
2. Mark the new hemline.
3. Cut off excess fabric, if appropriate.
4. Stitch on hem tape, if desired.
5. Pin up hem and sew by hand or machine, depending on fabric and garment.
6. Press hem.

C. To shorten a plain sleeve, follow directions for hem.

D. To shorten a sleeve with a cuff:

1. Remove cuff and button(s).
2. Remove the placket.
3. Press out any pleats or gathers.
4. Cut off the desired amount.
5. Make placket opening longer.
6. Reattach the placket. Press.
7. Reattach the cuff and button(s).

E. To shorten a sleeve with a vent:

1. Remove the buttons.
2. If sleeve has a lining, baste the lining to the sleeve about 8" above the hem line. Remove the lining stitches.
3. Remove hem stitches and press out crease. Use a sleeve board or sleeve roll.
4. Fold and press the new hemline.
5. Miter the corner at the bottom of the top vent.
6. Cut off excess fabric.
7. Handstitch the hem to the interfacing. Slipstitch the miter.
8. Slipstitch the ends of the bottom vent.
9. Replace the buttons.
10. Cut off excess lining fabric.
11. Turn the lining under and handstitch to one layer of fabric.
12. Press.

XXI. Reweaving a hole in garment/product

(Objective 20; JS 17)

A. Reweaving requires skill and patience.

B. Proper reweaving should not show at all. ***(See Fig. 9-18.)***

C. Study the weave of the fabric and try to duplicate it exactly.

D. Work with the fabric held taut in an embroidery hoop.

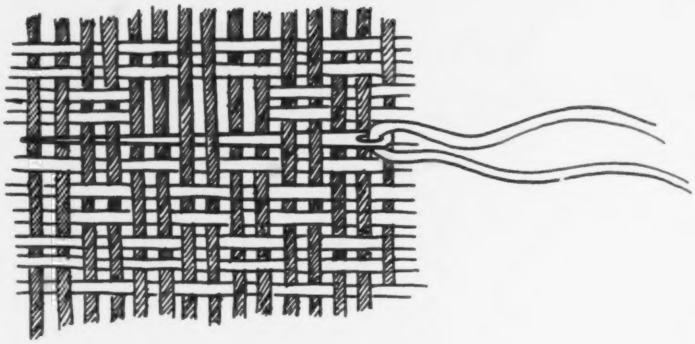


FIG. 9-18

E. Use threads unraveled from the fabric seamline for weaving.

F. Working from the outside of the fabric and starting several stitches into the body of the garment/product to secure the threads, fill in all lengthwise threads.

G. Weave in crosswise threads to match weave of the fabric.

H. When finished, steam press.

ALTERING READY-MADE PRODUCTS

UNIT IX

ASSIGNMENT SHEET 1--MATCH TERMS AND DEFINITIONS

Directions: Match each term with its definition by writing the letter in the space provided.

a. Facing
b. Fastener
c. Flair
d. Inset
e. Reweaving
f. Roll line
g. Yoke

___ 1. Restoring a woven fabric to its original design by hand sewing threads back into place; repairing a snag or tear in a woven fabric

___ 2. Piece of fabric or trim placed into the garment by cutting an opening and seaming the garment and fabric piece together

___ 3. Piece of fabric, fitted or bias, applied to finish the edges of necklines, armholes, and openings in a garment

___ 4. The line on which a lapel or collar turns back on itself in a garment

___ 5. Piece of fabric added to the top front or back of blouses and skirts to add design, fit, and strength

___ 6. Fullness at the bottom of a skirt, trousers, shirt, jacket, or sleeve; the part of a garment that spreads out and widens at lower edge

ALTERING READY-MADE PRODUCTS

UNIT IX

ASSIGNMENT SHEET 2--RECORDING ALTERATIONS

Directions: Schedule a fitting utilizing a ready-made garment. Identify at least four alterations needed, which might include adjustments in skirt or pants length, sleeve changes, shoulder seams, waistbands, pants width, pockets, coat linings, or new zipper applications.

Type of alteration	Estimated time required for each	Estimated supplies and materials
1.		
2.		
3.		
4.		

ALTERING READY-MADE PRODUCTS

UNIT IX

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET 1

1. e
2. d
3. a
4. f
5. g
6. c

ASSIGNMENT SHEET 2

Check for completeness.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 1--ADD/ELIMINATE SEAMS

Materials and equipment:

A pattern with a center back seam
Tissue paper or pattern fabric
Tape
Basic sewing supplies

Steps of procedure:

Eliminating seam

1. Trace pattern onto tissue paper or pattern fabric.

2. Pin tissue copies together.

3. Tape seams together.

4. Make new pattern piece, if desired.

Adding seam in pattern

1. Trace pattern onto tissue paper or pattern fabric.

2. Draw new seamline and cut along that line.

3. Add seam allowances.

4. Make new pattern piece, if desired.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 2--ADD/ELIMINATE CUFFS ON PANTS AND SLEEVE PATTERNS

Materials and equipment:

Pants pattern which includes cuffs
Pants pattern without cuffs
Pattern for sleeve with cuffs
Pattern for sleeve without cuffs
Tissue paper or pattern fabric
Tape
Basic sewing supplies

Steps of procedure:

Adding cuffs on pants pattern

1. Trace pattern onto tissue paper or pattern fabric.
2. Determine the size of the cuff to be added. Tape tissue to the bottom of the pattern piece. Measure from the hemline down the distance of the finished cuff.
3. Measure down the distance of the finished cuff again. Add the amount for the hem.
4. Finish making cuff.

Eliminating cuffs from pants pattern

1. Trace pattern onto tissue paper or pattern fabric.
2. Find the cuff foldline on the pattern. Use this line as the hemline.
3. Add the correct amount for the hem.
4. Cut off the pattern.

Adding cuff to sleeve pattern

1. Determine the width of the cuff to be added. Measure the wrist and add about 1".
2. Cut tissue or pattern fabric for the cuff. Pattern should measure twice the width of the cuff, plus two seam allowances. The length will be the measured distance around the wrist plus about 1" plus two seam allowances.
3. Trace sleeve pattern onto tissue paper or pattern fabric.
4. Widen the bottom edge of the sleeve, including seam allowance.
5. True seamlines.

6. Add seam allowance to bottom of sleeve.

Eliminating cuff from sleeve pattern

1. Measure width of cuff pattern piece. (Measure from stitching line to fold line.)

2. Trace sleeve pattern onto tissue paper or pattern fabric.

3. Lengthen sleeve by measured width of cuff pattern.

4. Remove seam allowance; add hem allowance.

5. Remove width from sleeve, if desired.

6. True seamlines.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 3--CHANGE JACKET COLLAR AND LAPELS

Materials and equipment:

Jacket with lapels needing alteration
Basic sewing supplies

Steps of procedure:

1. Mark new lapel line.
2. Baste.
3. Open facing seam and remove tape.
4. Mark new lapel line on interfacing.
5. Trim interfacing and baste in place.
6. Baste and stitch twill tape in place.
7. Trim facing and baste in place.
8. Stitch facing in place.
9. Adjust collar if necessary.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 4--SHORTEN/LENGTHEN COLLAR

Materials and equipment:

Collar pattern to lengthen or shorten
Basic sewing supplies

Steps of procedure:

1. Remove seam allowances from collar pattern.
2. Trace collar pattern on tissue paper or pattern fabric.
3. Beginning at point where the collar side meets the neck edge, redraw collar sides as desired.
4. Redraw outside edge of collar as desired.
5. Add seam allowances.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 5--ADD/ELIMINATE YOKE ON PATTERN

Materials and equipment:

Pattern for bodice with yoke
Pattern for bodice without yoke
Tissue paper or pattern fabric
Tape
Basic sewing supplies

Steps of procedure:

Adding a yoke to the pattern

1. Trace pattern onto tissue paper or pattern fabric.

2. Determine the position and shape of the yoke seam.

3. Draw the new seamline and cut on it.

4. Add seam allowance to yoke piece.

If gathers or pleats are desired:

1. Cut lower part of pattern apart lengthwise.

2. Spread apart and redraw pattern piece.

3. Mark pleat fold lines or the gathering area.

4. Add seam allowance.

5. Adjust shoulder at armhole seam.

Eliminating yoke and pleats from a pattern

1. Trace pattern onto tissue paper or pattern fabric.

2. Pin pattern pieces together at seamline.

3. Fold out gathers or pleats.

4. Trim shoulder seam.

5. Draw new pattern piece if desired.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 6--ADD AND REMOVE FLAIR FROM PANTS AND SKIRTS

Materials and equipment:

Skirt and pants with flair
Pattern for A-line or similar skirt
Pattern for straight skirt
Pattern fabric or tissue
Basic sewing supplies

Steps of procedure:

Removing flair from pants and skirts

1. Take out the hem(s).
2. On the pants, take out flair from the sides.
3. On the skirt, take out flair at side seams or from all seams.
4. Reshape hemline if necessary.

Adding flair to a skirt pattern

1. Trace pattern onto tissue paper or pattern fabric.
2. Draw lines where flair is to be added. Cut.
3. Spread tissue.
4. Straighten the hem.
5. Make new pattern piece.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 7--CHANGE DARTS IN PATTERN

Materials and equipment:

Pattern skirt back with dart
Pattern fabric or tissue
Basic sewing supplies

Steps of procedure:

Changing dart location in pattern

1. Trace pattern onto tissue paper or pattern fabric.
2. Establish dart line.
3. Cut out old dart.
4. Reposition dart. Tape in place.
5. Fill in space from old dart and redraw seam allowance line.

Changing darts in pattern from one large to two small

1. Trace pattern onto tissue paper or pattern fabric.
2. Measure the width of the large dart and divide that amount in half.
3. Position the new darts.
4. Reshape seam allowance line.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 8--CHANGE LOCATION OF DARTS IN READY-MADE GARMENTS

Materials and equipment:

Blouse or dress to be altered
Basic sewing supplies

Steps of procedure:

Changing bust line darts in ready-made garments

1. Determine the new point of the dart.
2. Take out seam and dart stitching. Press.
3. Move dart to new position. Adjust length, width, and curve as needed.
4. Sew dart and seam.

Changing shoulder darts

1. Take out shoulder seam and remove neckline finish.
2. Take out darts from shoulder seam. Replace them in neckline.
3. Recut the neckline so collar or facing will fit.

Adding darts to neckline to reduce size of opening

1. Remove collar or facing. Take out shoulder seams.
2. Recut neckline, making it lower.
3. Add darts.
4. Replace neckline finish.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 9--CHANGE LOCATION OF BUTTONS

Materials and equipment:

- Pattern for blouse with center front opening
- Tissue paper
- Fabric marker
- Buttons
- Ruler

Steps of procedure:

1. Trace center front of pattern onto tissue paper.
2. Lengthen bodice front pattern by 2".
3. Measure the width of the button.
4. On front bodice, measure down from seamline one-half the width of the button plus 1/4". Mark placement for top button.
5. Measure up 3-4" from hem line. Mark placement for last button.
6. Measure distance between top and bottom buttons.
7. Divide that distance by 2 and round to the closest whole number. Subtract 1. This is the number of buttons you will need between the top and bottom buttons.
8. Divide the distance by the number of buttons determined in Step 7. Measure down this amount from the top button and mark placement for next button.
9. Measure down from last button and mark placement for next button.
10. Repeat Step 9 until all button placements are marked.
11. Check that distances between the buttons are even and that there is a button at the bust point.
12. Make adjustments if necessary. To adjust, add or subtract a button or move placement of top and/or bottom buttons.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 10--CHANGE TYPE OF FASTENERS USED

Materials and equipment:

Pattern for garment with zipper
Pattern for garment with buttons
Pattern fabric or tissue
Basic sewing supplies

Steps of procedure:

Changing from buttons to a zipper

1. Trace pattern onto tissue paper or pattern fabric.
2. Mark seam allowance on both sides of the center line.
3. Cut the pattern off on that line.

Changing from zipper to buttons

1. Trace pattern onto tissue paper or pattern fabric.
2. Determine the position of the buttons. Draw the extension for the buttons.
3. Draw the facing.
4. Cut a new pattern.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 11--CHANGE, ADD, OR REMOVE POCKETS

Materials and equipment:

Pattern for skirt
Pattern fabric or tissue paper
Basic sewing supplies

Steps of procedure:

Adding a patch pocket

1. Trace pattern onto tissue paper or pattern fabric.
2. Make paper shape of finished pocket.
3. Locate the new pocket placement.
4. Make the pocket.
5. Sew the pocket in place.

Eliminating a set-in pocket

1. Check that change will not cause problems in seams, darts, facings, or interfacings.
2. Cut out skirt without pocket extensions.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 12--MAKE FACING PATTERN

Materials and equipment:

Pattern material or tissue paper
Basic sewing supplies
Bodice pattern

Steps of procedure:

1. Place the pattern on the tissue with carbon paper between them.

2. Trace outside edge of pattern and draw curve freehand.

3. Cut out new pattern and remove 1/8" from shoulder edge.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 13--MAKE LINING PATTERN FOR JACKET OR COAT

Materials and equipment:

Jacket front and back pattern pieces
Tissue paper or pattern fabric
Basic sewing supplies

Steps of procedure:

1. Trace entire front pattern onto tissue paper or pattern fabric.
2. Draw the facing line on the tissue.
3. Cut the pattern on the line and add seam allowance.
4. Cut the entire back pattern on tissue.
5. Add 2-3" to center back for pleat.
6. Tape together or redraw pattern.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 14--INCREASE AND DECREASE THE WIDTH OF GARMENTS

Materials and equipment:

Garment to be altered
Basic sewing supplies

Steps of procedure:

Adjusting seams

1. Determine whether there is enough seam allowance to change the fit.
2. If so, take out seams.
3. Resew seams using a smaller seam allowance.

Adjusting darts, tucks, and pleats

1. Take out darts, tucks, and/or pleats.
2. Measure for establishing new sewing lines.
3. Reconstruct garment.

Placing an inset in the side seam

1. Cut out an appropriate inset.
2. Take out the stitching at the side and sleeve seam.
3. Insert the inset. Hem it at the sleeve end.

Adjusting seams

1. Take out waistband and/or hem.
2. Sew new seamline.
3. Resew waistband and/or hem.

Adjusting darts

1. Take out seams or waistband so that you can get to darts.
2. Take out dart stitching.
3. Resew darts, making them larger. Adjust length and curve as necessary.
4. Reconstruct garment.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 15--LENGTHEN GARMENTS

Materials and equipment:

Garments to be altered
Basic sewing supplies

Steps of procedure:

Making hem longer

1. Determine whether there is enough fabric in the hem to lengthen the skirt.
2. Remove original hem.
3. Press.
4. Mark new fold line.
5. Attach new hem finishing.
6. Hem the garment.
7. Hide old hemline if necessary.

Lengthening the sleeves

1. Determine whether there is enough fabric in the jacket to make the sleeves longer.
2. Remove the original sleeve hem and the interfacing. Press.
3. Replace the interfacing.
4. Hem the sleeve against the interfacing.
5. Hem the lining in place.

Lengthening the bodice of a dress

1. Determine whether there is enough fabric at the waistline to lengthen the garment. If not, see whether some fabric can be cut out of the hem for an inset. If not, and the dress has a self-belt, use the fabric from the belt to make an inset.
2. Take the bodice apart from the skirt.
3. Cut the inset to fit the bottom of the bodice plus at least 1".
4. Sew inset to bodice and skirt, turning under 1/2" at both sides.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 16--SHORTEN GARMENTS

Materials and equipment:

Garments to be altered
Basic sewing supplies

Steps of procedure:

Shortening the skirt

1. Determine where the garment should be shortened.
2. Remove old hem and seam tape.
3. Mark new hemline.
4. Sew on new hem tape, if desired.
5. Pin up hem.
6. Sew hem. Press.

Shortening a sleeve with a cuff

1. Remove one cuff and button(s).
2. Remove the placket.
3. Press out any pleats or gathers.
4. Cut off desired amount.
5. Make placket opening longer.
6. Reattach placket.
7. Reattach cuff and button(s).
8. Repeat procedure for other sleeve.

Shortening a sleeve with a vent

1. Remove the buttons.
2. Baste lining to sleeve.
3. Remove hem stitches and press.

4. Fold and press new hemline.
5. Miter vent.
6. Cut off excess fabric.
7. Stitch hem to interfacing.
8. Slipstitch ends of vent.
9. Trim lining and reattach.

ALTERING READY-MADE GARMENTS

UNIT IX

JOB SHEET 17--REWEAVE HOLE IN GARMENT/PRODUCT

Materials and equipment:

Woven garment or product with a hole
Embroidery hoop
Tapestry needle

Steps of procedure:

1. Unravel threads from the garment in a place where it will not show.

2. Place garment in embroidery hoop.

3. Weave in lengthwise threads.

4. Weave in crosswise threads.

5. Steam press.

Custom Sewing

Altering Flat Patterns
Unit X

Cross-Reference Table of Instructional Materials

Competency*	Instructional Objective	Transparency Master	Handout	Assignment Sheet	Job Sheet	Test Item	Notes
-	1			1			
-	2				1		
-	3		1		2		

* From Custom Sewing Competency List, Competency-Based Scope and Sequence for Vocational Home Economics Programs in Missouri, 1987

Custom Sewing Mod. 3, pg. 97

ALTERING FLAT PATTERNS

UNIT X

UNIT OBJECTIVE

Upon completion of this unit, the student should be able to alter a pattern for differences in customer measurement. Competencies will be demonstrated by correctly performing the procedures outlined in the Assignment and Job Sheets.

SPECIFIC OBJECTIVES

Upon completion of this unit, the student should be able to:

1. Based on the content outline, MATCH TERMS AND DEFINITIONS RELATED TO ALTERING FLAT PATTERNS by completing Assignment Sheet 1.
2. Based on the content outline, DETERMINE ALTERATIONS NEEDED by completing Job Sheet 1.
3. Based on the content outline and Handout 1, MAKE SLOPERS by completing Job Sheet 2.

ALTERING FLAT PATTERNS

UNIT X

SUGGESTED ACTIVITIES

A. Obtain additional materials and/or invite resource people to supplement/reinforce information provided in this unit.

(NOTE: This step should be completed prior to the teaching of this unit.)

B. Provide students with Objective Sheet.

C. Discuss Unit and Specific Objectives.

D. Provide students with Information Sheet.

E. Discuss the Information Sheet.

F. Provide students with Handout, Assignment and/or Job Sheets. Assignment Sheet 1 may be used as part of a Unit Test, if desired. Job Sheets are in an abbreviated form and additional instructions and/or demonstrations will be necessary for students to successfully master the competencies.

G. Integrate the following activities throughout the teaching of this unit:

1. Introduce the unit by explaining the terminology provided on the Information Sheet.
2. Provide students with access to several books on pattern adjustments for more detailed instructions and alternate methods of adjusting flat patterns.
3. Demonstrate the methods of altering patterns; discuss procedures, stressing reasons for additions or subtractions and the importance of following approved methods.
4. Provide examples of alternate methods using currently popular fashion designs which might not lend themselves to approved methods.
5. Help students assess amount of time involved in altering patterns in order to determine correct charges for work.
6. Have students add pattern alterations to their notebook using quarter-scale patterns for their examples and including the steps required with directions for each step. This will be a good resource for future reference.
7. Students may practice making all these alterations to patterns on the quarter-scale slopers included in **Handout 1**. Each student should cut out a set of slopers (**Job Sheet 1**) and cut out a tissue paper or pattern paper copy on which to make the alterations.

H. Use Assignment Sheets and Job Sheets to test mastery of competencies.

I. Reteach if necessary.

CONTENTS OF THIS UNIT

A. Cross-Reference Table of Instructional Materials

B. Objective Sheet

C. Suggested Activities

D. Information Sheet

E. Handout

   1. HO 1--Quarter-Scale Slopers

F. Assignment Sheet

   1. AS 1--Match Terms and Definitions

G. Answers to Assignment Sheet

H. Job Sheets

   1. JS 1--Determine Types of Alterations Needed
   2. JS 2--Make Slopers

RESOURCES

(NOTE: See Appendix A: "Helpful Resources" and Appendix B: "Glossary of Terms.")

ALTERING FLAT PATTERNS

UNIT X

INFORMATION SHEET

I. Terms and definitions

(Objective 1; AS 1)

A. Armscye--armhole

B. Balance--achieved when garment hangs at equal distances from the body on the right and left and on front and back

C. Basic pattern--fitted pattern with simple design lines, sleeves, skirt, bodice, and neckline facings; used to make a pattern that exactly fits the body; usually made in muslin (since muslin can be taken apart and used as a pattern)

D. Commercial pattern--fully developed fashion pattern which gives all pieces, layouts, and sewing instructions

E. Design lines--silhouette of the garment resulting from the shapes, placement of parts, and placement of design details

F. Designer darts--darts which end about 1/2"-1" from the fullest part of the body or a body point

G. Ease--amount of fullness added to body measurements to allow for body movement

H. Grainline--straight line on a pattern which is always placed parallel or at right angles to the selvage, unless otherwise specified

I. Line--basic seamlines, shoulder, and side seams which usually follow the outline of the body

J. Quarter-scale pattern--pattern that is a smaller, proportional (one-fourth of the size) version of a commercial pattern without seamlines

K. Set--way a garment lies on the body

L. Slopers--basic pattern shapes used to design and alter patterns

M. Structural darts--darts which end at the fullest part of the body or at a body point

N. True seamlines--to redraw seamlines so that they are as even or curved as they were before the pattern was altered

II. Basic rules for making flat pattern adjustments

(Objective 2; JS 1)

A. Keep the grainlines straight.

B. Keep the center front and center back straight.

C. Maintain wearing ease built into pattern.

D. Use the adjustment lines provided for adjusting the length. Make corresponding changes on all pieces affected by any change (length of front, back, facings, and lining; size of front and back neckline and collar).

E. When making width adjustments, remember that each pattern piece represents one quarter of the body.

F. Make adjustments that do not distort the style of the original design.

G. Redraw printed construction lines that have been interrupted by your adjustments by connecting the beginning and the end points of the line with a new straight (or curved) line, or by adding to one line and subtracting from the other equally.

H. Look for individual differences where proper fitting will make the garment hang well. Possibilities include one arm or leg shorter than the other; long- or short-waistedness; and sloping or rounded shoulders.

I. Measure the pattern completely before beginning alterations.

J. Measure the client and compare his/her measurements with the pattern.

III. Slopers

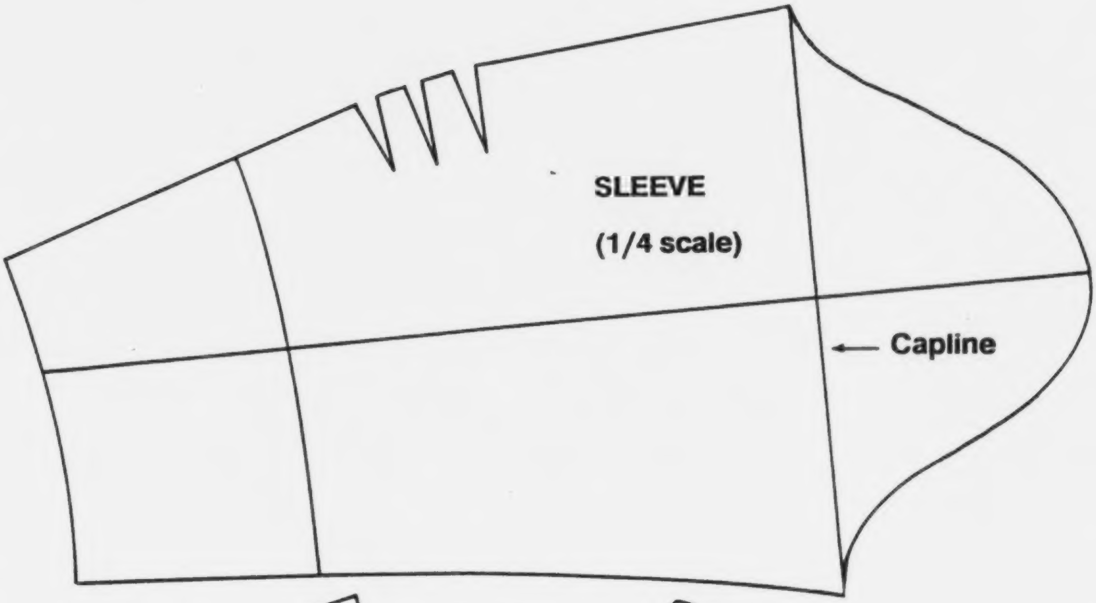
(Objective 3; HO 1; JS 2)

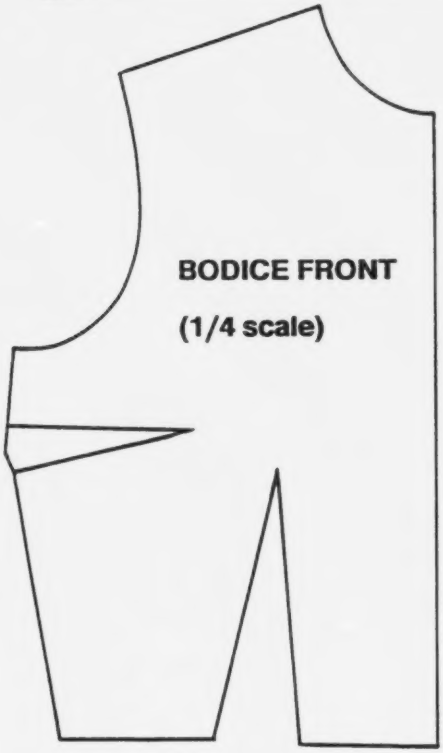
A. Use slopers (either full or quarter-sized) to make pattern adjustments and design alterations.

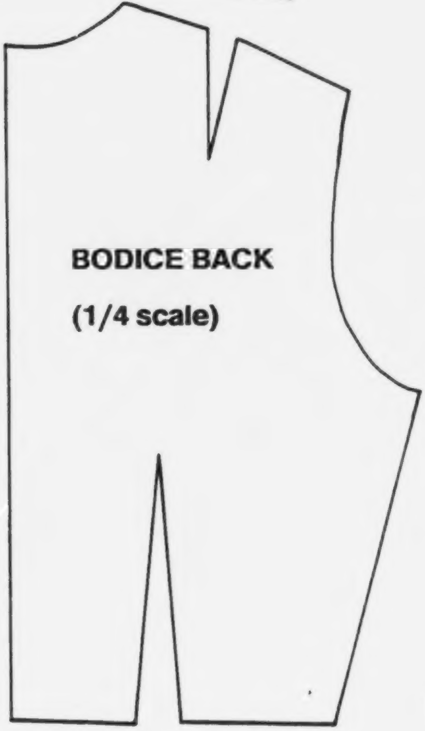
B. Make adjustments to the pattern for size and style changes.

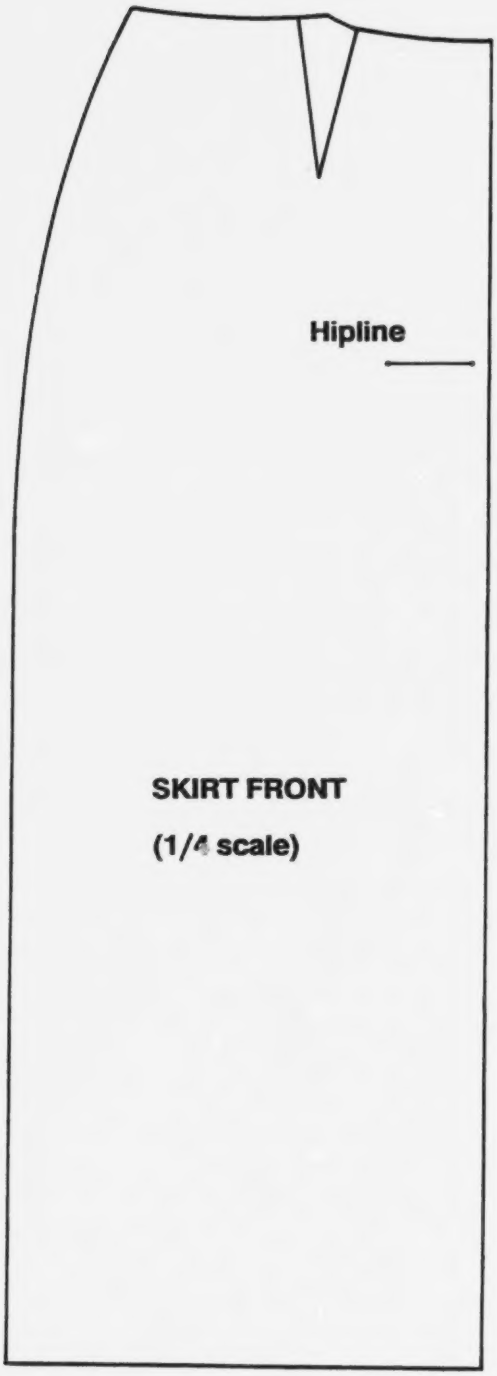
ALTERING FLAT PATTERNS

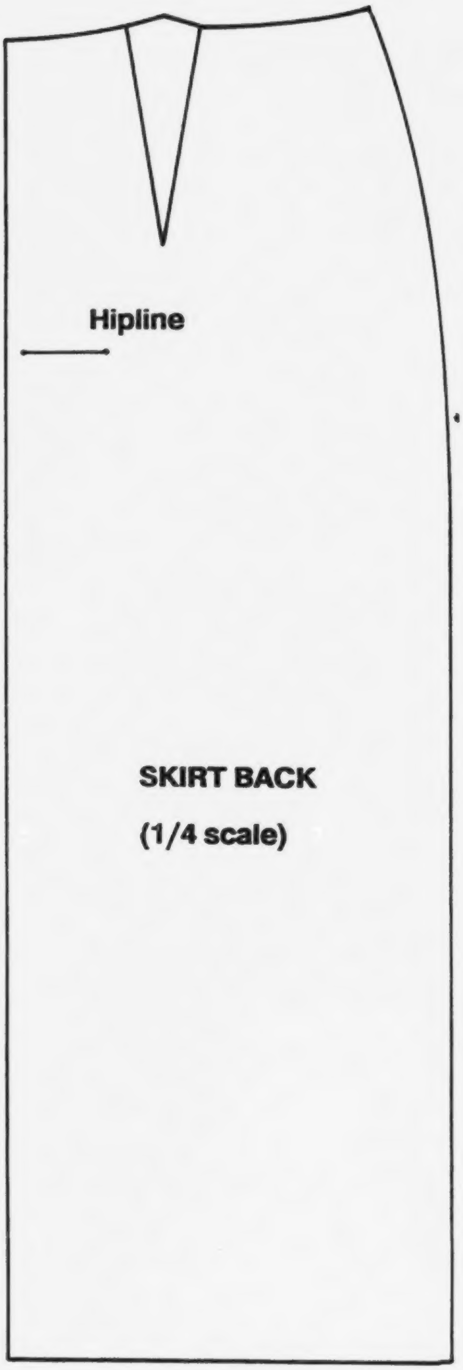
HANDOUT 1--QUARTER-SCALE SLOPERS


SLEEVE
(1/4 scale)
Capline


BODICE FRONT
(1/4 scale)


BODICE BACK
(1/4 scale)


Hipline
SKIRT FRONT
(1/4 scale)


Hipline
SKIRT BACK
(1/4 scale)

ALTERING FLAT PATTERNS

UNIT X

ASSIGNMENT SHEET 1--MATCH TERMS AND DEFINITIONS

Matching: Match each term with its definition by writing the letter(s) in the space provided.

a. Armscye
b. Balance
c. Basic pattern
d. Commercial pattern
e. Design line
ab. Designer dart
ac. Ease
ad. Grainline
ae. Quarter-scale pattern
bc. Set
bd. Sloper
be. Structural dart
cd. True seamline

___ 1. To redraw seamlines so that they are as even or curved as they were before the pattern was altered

___ 2. Silhouette of the garment resulting from the shapes, placement of parts, and placement of design details

___ 3. Achieved when garment hangs at equal distances from the body on the right and left and also from front and back

___ 4. Straight line on a pattern which is always placed parallel or at right angles to the selvage unless otherwise specified

___ 5. Stitching which ends about 1/2"-1" from the fullest part of the body or a body point

___ 6. Way a garment lies on the body

___ 7. Basic pattern shapes used to design and alter patterns

___ 8. Amount of fullness added to body measurements to allow for body movement

___ 9. Fitted pattern with simple design lines, sleeves, skirt, bodice, and neckline facings; used to make a pattern that exactly fits the body

___ 10. Smaller, proportional version of a commercial pattern without seamlines

ALTERING FLAT PATTERNS

UNIT X

ANSWERS TO ASSIGNMENT SHEET

ASSIGNMENT SHEET 1

1. cd
2. e
3. b
4. ad
5. ab
6. bc
7. bd
8. ac
9. c
10. ae

ALTERING FLAT PATTERNS

UNIT X

JOB SHEET 1--DETERMINE TYPES OF ALTERATIONS NEEDED

Materials and equipment:

Commercial pattern
Customer's measurements
Measuring tape

Steps of procedure:

1. Record the measurements from the pattern in the first column. Some will be on the envelope and some you will have to measure. Record the amount of ease allowed next to the measurement.
2. Record the measurements of the customer in the next column.
3. Record any differences in the third column.
4. Record any other pertinent information in the last column.

	Pattern meas./ease allowed	Customer meas.	Diff. (+/-)	Notes
Bust				
Chest				
Waist				
Back waist length				
Front waist length				
Neck				
High bust				
Shoulder				
Back width				
Arm circumference				

	Pattern meas./ease allowed	Customer meas.	Diff. (+/-)	Notes
Arm length				
a. Shoulder to elbow				
b. Elbow to wrist bone				
Shirt sleeve length				
Full hip				
High hip				
Thigh				
Knee				
Crotch length				
Outseam				
Inseam				
Finished skirt length				

Customer name ______________________________

Customer has the following special considerations:

___ Flat derriere

___ Low derriere

___ Large bust

___ Humpback

___ Uneven shoulders (L R higher)

___ Uneven hip bones (L R higher)

___ Protruding abdomen

___ Protruding derriere

___ Protruding shoulder blades

___ Skirt (side seams) hang backward / forward

___ Hemline hikes up in front / back

___ Hemline droops in front / back

___ Hemline shorter on sides

___ Sway back

___ Other (specify):

ALTERING FLAT PATTERNS

UNIT X

JOB SHEET 2--MAKE SLOPERS

Materials and equipment:

Handout 1--Quarter-Scale Slopers
Cardboard OR plastic template
Paper scissors
Glue

Steps of procedure:

1. Glue the quarter-scale pattern drawings onto cardboard or trace them onto template plastic.

2. Cut them out. Use these quarter-scale slopers to practice altering flat patterns.

APPENDIX A

HELPFUL RESOURCES

★(NOTE: These resources are available for Missouri educators on free loan from Missouri Vocational Resource Center, 8 London Hall, Columbia, MO 65211 [800/392-7217].)

I. Books and Curriculum Guides

A. Belleau, Bonnie D. "Self Checking Lessons In Clothing Construction." Portland, ME: J. Weston Walch.

B. Brown, Gail, and Pati Palmer. Sewing with Sergers: The Complete Handbook for Overlock Sewing. Portland, OR: Palmer-Pletsch, 1985.

C. Butterick. Vogue Sewing. New York: Harper & Row, 1982.

D. Bystrom, Adoree Evans. The Tailoring Process: Custom & Simplified. Cincinnati: South-Western Pub. Co., 1985.

E. Cabrera, Roberto, and Patricia Flaherty Meyers. Classic Tailoring Techniques: A Construction Guide for Women's Wear. New York: Fairchild Publications, 1984.

F. Clothing Assistant. Lubbock, TX: Instructional Materials Center, University of Texas Press, 1983.

G. Davis, Ronald I. Men's Garments 1830-1900: A Guide to Pattern Cutting. London: Batsford, 1989.

H. Farmer, Bonnita M., and Lois M. Gotwals. Concepts of Fit: An Individualized Approach to Pattern Design. New York: Macmillan, 1982.

I. Gebbia, Anthony S., and Master Designer. Modern Method of Women's & Children's Garment Design: Measurement Charts, Pattern Drafting, Grading. Chicago: Master Designer, 1981.

J. Godfrey, Frank P. An International History of the Sewing Machine. London: R. Hale, 1982.

K. King, Rosalie Rosso. Textile Identification, Conservation, and Preservation. Park Ridge, NJ: Noyes Publications, 1985.

L. Levenson, Helene. Creating an Interior. Englewood Cliffs, NJ: Prentice-Hall, 1980.

M. Lyle, Dorothy C., and J. Brinkley. Contemporary Clothing. Peoria, IL: Bennett, 1983.

N. McCall Pattern Guide to Sewing Power. Dubuque, IA: Kendall-Hunt, 1983.

O. Neal, Mary. Custom Draperies In Interior Design. New York: Elsevier Science, 1982.

P. Singer Sewing Reference Library. Cy DeCosse Incorporated, 5900 Green Oak Drive, Minnetonka, MN 55343 (800/328-0590, ext. 725; 612/936-4700).

1. Clothing Care and Repair, 1986.
2. Creative Sewing Ideas, 1990.
3. Decorative Machine Stitching, 1990.
4. More Sewing for the Home, 1987.
5. Quilting by Machine, 1990.
6. Sewing Activewear, 1986.
7. Sewing Essentials, 1986.
8. Sewing for Children, 1988.
9. Sewing for Style, 1986.
10. Sewing for the Home, 1986.
11. Sewing Knits, 1991.
12. Sewing Lingerie, 1991.
13. Sewing Pants that Fit, 1989.
14. Sewing Projects for the Home, 1991.
15. Sewing Specialty Fabrics, 1986.
16. Sewing With an Overlock, 1989.
17. Tailoring, 1988.
18. The Perfect Fit, 1987.
19. Time Saving Sewing, 1987.

Q. Stamper, Anita A.; Sue Humphries Sharp; Linda B. Donnell. Evaluating Apparel Quality. New York: Fairchild Publications, 1986.

R. Sunset Books, ed. Curtains, Draperies, and Shades. Menlo Park, CA: Lane, 1981.

S. Vanderhoff, M. Clothes, Clues and Careers. Lexington, KY: Ginn (Xerox Corp.), 1981.

T. Weber, Jeanette. Clothing: Fashion, Fabric , Construction. Mission Hills, CA: Glencoe Div. of Macmillian/McGraw-Hill, 1989.

★U. Westfall, Mary G. Successful Sewing. South Holland, IL: Goodheart-Wilcox, 1990.

V. Wyllie, Ethel. Today's Custom Tailoring. 3rd ed. Peoria, IL: McKnight Div. of Glencoe, 1987.

II. Leaflets

A. Simplicity Pattern Company, Inc., 901 Wayne Street, Niles, MN 49121-0099 (800/843-8089 to order teaching kit).

1. Action-Packed Sewing
2. Fabric Sewing Guide
3. Fasten It!
4. Fuss-Free Guide to Fitting Pants
5. Guide to Sewing for Children
6. Indispensable Interfacing
7. Metric's Sew Easy
8. Napped Fabric Know How

9. Sewing for Beginners
10. Sewing with Wool Jersey
11. Sewing Sheers and Laces
12. Sewing Synthetic Suedes and Leathers
13. Simple Pattern Adjustments
14. Tailoring Today

B. University of Missouri Extension Publications (Available from the University Extension Center in each county or from Extension Publications, 2800 Maguire, University of Missouri, Columbia, MO 65211 [314/882-7216]. Write for pricing details and complete catalog.)

1. ALTERATIONS

MP0545	Alterations for a Good Fit in Men's and Women's Apparel
GH0431	Narrowing Lapels and Collars

2. CLOTHING CARE

GH0134	Home Laundry: Getting the Results You Want
MP0663	Stain Removal from Washable Fabrics

3. CLOTHING CONSTRUCTION

GH0992	Building a Workable Wardrobe
GH0784	Clothing for Men and Women with Arthritis
GH0721	Good Fit in Men's and Women's Apparel
GH0635	Kids and Clothes
GH0711	Men's Wear I: Body Dimensions and Wardrobe Coordination
GH0712	Men's Wear II: Garment Fit, Quality and Care
GH0653	Selecting Clothing for Handicapped Children
GH0405	Use and Fit of a Pattern

4. DESIGN

GH0550-54	Designs for You: Parts I-V
GH0771	Dressing Slim

5. FABRICS AND TEXTILES

RP0174	Facts about Fabric Flammability

6. READY-MADES

GH0851	Insulated Outerwear: Fabrics and Fillings
GH0824	The Clothing Market Place: Look to the Label

7. HOME FURNISHINGS

GH2066	Care of Valuable Possessions, Furniture, Tapestries, Rugs, Textiles, Paintings, etc.
RP0243	Decorating with Fabric: Making Shades

RP0255	Decorating with Fabric: Making Curtains and Draperies
GH0981	Fabrics for the Home: Choosing Draperies
FO0069	How to Upholster Dining Room and Kitchen Chairs
EC0690	How to Upholster Chairs
EC0798	Make Your Own Chair Covers
EC0793	Make Your Own Draperies

III. Audiovisuals

A. Videos, booklets and catalog from Nancy's Notions, Ltd., 333 Beichl Avenue, PO Box 683, Beaver Dam, WI 53916-0683 (800/848-0392).

1. Appliqué: Basic to Creative, 1989. 60 min. (#SN-305)
2. Blazers and Vests--Beyond the Basics, 1990. 60 min. (#SN-325)
3. Busy Woman's Fitting Techniques, 1988. 60 min. (#SN-905)
4. Busy Woman's Sewing Combo, 1988. 120 min. (#SN-218)
5. Contemporary Serging, 1987. 60 min. (#SN-812)
6. Decorating on the Double, 1991. 60 min. (#SN-430)
7. Designer Wearables, 1991. 60 min. (#SN-525)
8. Elastics Update, 1991. 30 min. (#SN-535).
9. Fitting for Style, 1991. 60 min. (#SN-440)
10. Fuse, Press, Success! 1991. 60 min. (#SN-425)
11. Organizing Your Sewing Area, 1990. 30 min. (#SN-340)
12. Personalizing Patterns, 1990. 60 min. (#SN-335)
13. Plaid Pointers, 1991. 30 min. (#SN-445)
14. Quick Jackets, 1991. 60 min. (#SN-510)
15. Quick Napkin Creations, 1991. 30 min. (#SN-520)
16. Quilting Options, 1991. 60 min. (#SN-515)
17. Serge, Sew and Decorate with Fabric, 1989. 60 min. (#SN-310)
18. Serger Feet on the Go, 1991. 60 min. (#SN-540)
19. Sew an Heirloom, 1991. 60 min. (#SN-545)
20. Sew à la Art, 1990. 60 min. (#SN-410)
21. Sportswear--Serge It/Sew It, 1990. 60 min. (#SN-330)
22. Stitch-Again Wardrobe, 1991. 60 min. (#SN-530)
23. Thread to Feet--Untapped Ideas, 1990. 60 min. (#SR-320)

B. Pellon Teaching Aids and Literature Series. Available from Nancy's Notions, Ltd., 333 Beichl Avenue, PO Box 683, Beaver Dam, WI 53916-0683 (800/848-0392). Freudenberg Nonwovens, Pellon Division, 119 West 40th Street, New York, NY 10018 (800/833-0690).

1. Fibers, Fabrics and Function (video), 1991. 30 min.

C. Videos from Career Aids Div., Opportunities for Learning, 941 Hickory Lane, PO Box 8103, Mansfield, OH 44901-8103 (800/243-7116)

1. Sewing Video Series: Craft and Gifts to Sew; Sew a Wardrobe in a Weekend; Speed Sewing--10 Super Tips, 1989. 30 min. each. (#112918-HES)
2. Fashion Your Figure, 1988. 33 min., teacher's guide. (#100533-HES)

D. Videos by the Curriculum and Instructional Materials Center (CIMC), Oklahoma Department of Vocational and Technical Education, 1500 West Seventh Avenue, Stillwater, OK 74074-4364 (800/654-4502).

1. Fabrics and Textiles, 1988. 8:45 min. (#HE 7106)
★2. Personal Clothing Management: Unit V--Construction Techniques, 1986. 34 min. (HE video 10)
3. Personal Clothing Management: Unit VI--Altering Ready-to-Wear, 1986. 67 min. (#HE7023)

E. Videos from the Agricultural Communications Center, University of Idaho, Moscow, ID 83843-4196 (208/885-6436).

1. Sergers, The Basics, 1986. 23 min. (#294)
2. Sergers, Construction Methods, 1986. 28 min. (#295)
3. Serger Shopping, 1988. 18 min. (#518)

F. Filmstrips from McCalls Pattern Company, Box 9119, Manhattan, KS 66502-9990 (913/776-4041).

1. Birth of a Pattern, 1986. 20 min.
2. Focus on Fit, 1983. 22 min.

G. Videos from NASCO, 901 Janesville Avenue, Fort Atkinson, WI 53538 (800/558-9595)

1. Beginning Sewing Techniques, 1988. 30 min. (#WA11803H)
2. Sewing with Sergers--Basics, 1990. 60 min. (#WA12136H)

H. The Learning Seed, 330 Telser Road, Lake Zurich, IL 60047 (800/634-4941).

★1. Color in Clothing (HE video 73), 1991. 20 min.

2. What Everyone Should Know About Fabrics, Part I and II (filmstrips or still video), 1985. 27 min. (#73)

I. American Media Incorporated, 1454 30th St., W. Des Moines, IA 50265 (800/262-2557)

★1. Professional Presence (BOE video 57), 1989, 24 min.

IV. Computer Software

A. Orange Juice Software Systems, 338 South Arch Avenue, New Richmond, WI 54017 (715/246-3588)

1. Know Your Pattern (Apple 5 1/4" or 3 1/2" disks). (#HE2010)
2. The Pattern Layout Simulator (Apple 5 1/4" or 3 1/2" disk). (#HE3020)
3. Design Elements and Principles (Apple 5 1/4" disks). (#HE1090)
4. Techniques of Sewing Series (Apple 5 1/4" disks).
    a. Staystitching (#HE2030)
    b. Edgestitching (#HE2040)
    c. Gathers (#HE2050)

    d. Darts (#HE2060)

5. Care for Your Wear (Apple 5 1/4" or 3 1/2" disks). (#HE8060) Combines interactive tutorial with reference guide.

B. The Learning Seed, 330 Telser Road, Lake Zurich, IL 60047 (800/634-4941).

1. Clothing Quiz (IBM or Apple II). (#74)
2. Fiber Basics for Clothing (IBM or Apple II). (#98)

V. Sewing Publications

(NOTE: Because subscription prices change, write or call for current information.)

A. Sew Business. Gralla Publications, 15400 Knoll Trail Drive, Dallas, TX 75248. Monthly trade newspaper magazine designed for fabric stores focusing on merchandising trends, new products coming on the market, and a fabric forecast.

B. Sew News. P.J.S. Publications, Inc., Box 1790, News Plaza, Peoria, IL 61656 (309/682-6626). Monthly newspaper on up-to-date sewing techniques, new machines and products, fashion news, and ads pertaining to every phase of sewing.

C. Silver Thimble. Valley Brook Enterprises, Inc., 311 Valley Brook Road, McMurray, PA 15317 (412/941-1360). Monthly sewing and fashion report geared to keep the home sewer up-to-date.

D. Sewing Update. Palmer/Pletsch Sewing Update, 2269 Chestnut St., #269, San Francisco, CA 94123 (415/931-7370). Bimonthly newsletter for fashion sewing.

E. The Needle's Eye Worldwide. Union Special Corp., 222 N. LaSalle St., Suite 900, Chicago, IL 60601-1079 (312/606-9500). Bimonthly.

APPENDIX B

GLOSSARY OF TERMS

Accordion pleats--very narrow pleats which are pressed along the entire length of the garment. The folds resemble an accordion.

Applique--small piece or pieces of fabric cut into shapes and applied by hand or machine on top of a background fabric for decoration

Apron--trim below the window sill

Armscye--armhole

Backstitch--reinforcement at the beginning and end of a seam done by stitching backwards for a few stitches

Baseboard--molding that extends up the wall from the floor

Balance--achieved when garment hangs at equal distances from the body on the right and left and on front and back

Basic pattern--fitted pattern with simple design lines, sleeves, skirt, bodice, and neckline facings; used to make a pattern that exactly fits the body; usually made in muslin (since muslin can be taken apart and used as a pattern)

Batting--sheet of (usually) polyester filling placed between the face and backing of quilts and some coverlets. Batting must be quilted or tied in place to keep it from bunching with wear and washing. Batting may also be made from wool, cotton, silk, or a combination of fibers.

Beading--narrow strip of open-work through which ribbon can be inserted; small beads applied singly or in groups to create a design

Bed--flat base of the machine which supports the head and houses the bobbin and bobbin case

Beeswax--used to strengthen thread and prevent snarling and snagging

Belt--strip of fabric (usually matching) which is placed at the waistline of a garment. It is usually either all fabric and tied, or a covered piece of stiffening with a buckle.

Belt carriers--self-fabric strips attached to waistband or side seam of garment to hold a belt in place

Belt loop--thread or fabric loop used to hold belt in place

Belting--stiff, ribbon-like banding used inside a waistline as a stay or covered with fabric and used outside as a belt

Bias binding--strip of fabric cut on the bias (45 degree angle) of the fabric to provide stretch and ease in application; used to finish an outside edge

Bias nonwoven interfacing--fabric that stretches in all directions

Binding--piece of fabric added to the garment/product to finish the outside edge

Blend--combination of at least two different fibers in one yarn (a blended fabric) or a fabric made from two or more different yarns (a combination fabric)

Blindstitch--hand- or machine stitch used for hemming and holding facings in place. This stitch is invisible (or almost invisible) on the outside of the fabric.

Blind-tucks--when the fold of each tuck touches or overlaps the next, covering the stitching line

Bobbin hook race/shuttle--circular piece of metal surrounding the bobbin that turns to catch the upper thread and the bobbin thread to form the stitch

Box pleats--two side pleats which turn away from each other

Braid--woven, novelty trim finished on both sides

Button--used to close a garment and to accent; comes in two types, sew-through and shank

Button foot--a small machine foot used to apply buttons

Cafe curtain--tiered curtain which can be shirred onto rods or made with pleated tops. It may be used in combination with a valance or decorator shade.

Cam--circular piece of metal or plastic, either built-in or inserted into the machine, that controls stitch formation by its outer edge indentations; used to make decorative stitches

Casing--tunnel at the top of a curtain; open at both ends so a curtain rod or pole can be inserted

Catchstitch--cross stitch used to hold raw edges in place securely; a stable and secure stitch used in areas where edges need to be flat; particularly good for heavy fabrics

Chevron--"V" pattern formed by sewing plaid or striped fabric on the bias and matching at seams

Circular ruffle--ruffle cut in a circle. Fullness is created when the inner curve of the circle is straightened.

Classic--traditional style that can stay in fashion for a very long time. Examples include the blazer jacket and blue jeans.

Clip--snips made into seam allowance, especially for inward curves. Do not use on curves which have strain such as crotch seams and armhole edges.

Collar fall--part of the collar which covers the collar stand

Collar roll line--foldline between the collar stand and the fall; the line on which the collar turns

Collar stand--section of a two-part collar that lies against the neck

Commercial pattern--fully developed fashion pattern which gives all pieces, layouts, and sewing instructions

Compatibility--having the same care qualities

Compressed air--used to remove dust and lint from machine; available in cans at sewing and fabric stores

Continuous bias--long, bias strip made from a square or rectangle of fabric

Continuous lap--single piece of fabric used for placket facing

Conventional machine--multi-purpose sewing machine designed to perform utility and decorative stitching

Convertible collar--may be worn open as a partial roll collar or closed as a standing collar with a fall

Cording--piece of cord covered with bias fabric and inserted between seams

Couture--sewing or needlework; the product of a dressmaker

Coverlet--spread, similar to a bedspread, which covers the top of the bed and extends only a little way down the mattress

Cuffs--wide hem made by turning the fabric back against the garment. On a sleeve, additional fabric may be added, finished, and then turned up or buttoned. On slacks, extra fabric in the length is turned up and tacked at the seams.

Curtain--window treatment, usually fabric shirred onto a rod, often with a heading

Dart or released tuck--tuck used to control fullness or shape. The fold is formed on the inside, stitched to a designated point, and then released.

Decorative stitches--fancy stitches made by hand or machine to decorate, finish, and/or add design

Design lines--silhouette of the garment resulting from the shapes, placement of parts, and placement of design details

Designer darts--darts which end about 1/2"-1" from the fullest part of the body or a body point

Directional cutting--cutting with the grain of the fabric; helps fabric maintain its original size and shape

Directional stitching--stitching with the grain of the fabric to prevent stretching or changing the shape of the seam area

Drapery--window treatment using a stiffening at the top, pleats, and special pins to attach to a drapery rod

Dress fabric interfacing--fabric such as lawn, muslin, batiste, taffeta, organdy, percale, unbleached muslin and some lining or underlining fabric; designed for use in garments, but sometimes used for interfacing

Drop--distance from the top of the mattress down the side to the edge of the coverlet or bedspread

Dropped shoulder--shoulder seam that is lowered to hang down over the top of the arm

Dust ruffle--bed treatment of fabric, either gathered or pleated, which extends from the box springs to the floor

Dye--substance added to produce or change the color

Ease--the amount of fullness added to body measurements to allow for body movement

Even plaid--plaid where the stripe arrangement is the same in both lengthwise and crosswise directions and, when folded in any direction through center of plaid, results in halves forming a mirror image

Eyelet--small hole in a garment or belt, finished by handstitching or a metal ring; used for drawstrings, cuff links, and to hold the prong of a buckle

Face--top fabric of a quilt or coverlet

Facing--a piece of fabric, fitted or bias, applied to finish the edges of necklines, armholes, and other openings in a garment

Fad--strikingly different fashion that is popular for a short period of time, perhaps a few weeks or a season, but is soon forgotten. Examples include socks with individual toes and dog-leash belts.

Fashion fabric--fabric used for construction of the garment

Fasteners--any notions used to close a garment (zippers, hooks and eyes, snaps, etc.)

Feed dogs--the teeth in a sewing machine or overlock machine, located below the presser foot, which move the fabric through the machine under the needle

Finger press--flattening an area, such as a fold or seamline, with the fingers

Flair--fullness at the bottom of a skirt, trousers, shirt, jacket, or a sleeve. The part of a garment that spreads out and widens at its lower edge.

Flat braid--braid available in many widths and colors; used singly or in several rows to create a border effect

Flat collar--collar which lies flat against the garment (e.g., a Peter Pan collar)

Fold-over braid--designed for trimming and enclosing raw edges of a garment, such as a neckline or sleeve opening. The top (right) side of a fold-over braid is narrower than the back side.

Frame--all the (usually wooden) trim around the window

Gathers--small, soft folds made by drawing fabric up on a line of hand or machine stitching

Glovestitch--decorative, topstitching technique done by hand. The stitches are the same size on top and on the underside.

Grade--to remove bulk by trimming seam allowances to different widths

Grain--direction of fabric threads. Yarns running parallel to selvage are on the lengthwise grain, and those running from selvage to selvage are on the crosswise grain. For perfect grain, the yarns must be at right angles to each other.

Grainline--straight line on a pattern which is always placed parallel or at right angles to the selvage, unless otherwise specified

Gusset--inset of triangular shaped fabric used to give more room or to make a bias area stronger (e.g., kimono sleeve or crotch area)

Hand baste--to stitch the garment together by hand using long, running stitches

Hand of fabric--the way in which the fabric drapes over the hand; the feel; drape-ability and handling of a piece of fabric

Head--total sewing machine excluding the cabinet or base on which it rests

Heading--decorative ruffle above the casing along the upper edge of a curtain

Hem--edge finish formed by folding under the raw edge and stitching it by hand or machine

Hemming stitch--decorative, open-work stitch made by drawing lengthwise threads of the fabric and fastening the crosswise threads in clusters

Hemmed patch pocket--single piece of fabric with hem at open edge of pocket and seam allowance turned under

Hook and eye--closure made of metal used to hold two pieces of fabric together securely (often on necklines and waistbands)

Horsehair braid--used to stiffen hem edges, especially for evening or bridal wear, so they will flare out softly

In-seam pocket--This pocket does not show from the outside, but rather, is an opening in the side seam. It is generally made from lining fabric and may need to be reinforced with staystitching to prevent raveling.

Inset--a piece of fabric or trim placed into the garment by cutting an opening and seaming the garment and inset together; a piece of fabric that has been inserted into a garment for better fit or decoration

Interfacing--inner fabric that provides support or body and shape retention to areas such as necklines, collars, cuffs, waistbands, lapels, button closures, and pocket flaps

Interlining--layer of fabric placed between the lining and the fashion fabric to give warmth and bulk

Interlock knit--fabric knit on a special machine to give it a smooth, reversible face. The stretchability of these knits is dependent upon the yarn used in their construction.

Inverted pleats--two side pleats which are turned toward each other and meet

Iron-on or fusible interfacing--fabrics specially coated so that they can be applied with heat, pressure, or steam

Kimono sleeve--sleeve cut out with bodice as one piece

Knife or side pleats--series of pleats that turn in the same direction, are equal in width (usually), and are pressed straight to the hem

Knitted interfacing--fabric usually made of nylon tricot with lengthwise stability and crosswise stretch; suitable for some knit fabrics

Lace--fancy flat or ruffled trim used to finish and decorate edges or as a decorative accent

Lapel--sometimes called revere, the part of a shirt, dress, or jacket which turns back against the garment, especially front part of garment that folds back to form continuation of collar

Lay out--positioning the pattern pieces on the fabric before cutting

Lettuce leaf edging--finish used on stretchy knit or jersey fabrics to achieve a ruffled effect

Line--basic seamlines, shoulder, and side seams which usually follow the outline of the body

Lined or faced patch pocket--A lining is attached to the pocket at hem edge and the pocket is finished by stitching and turning or by hemming lining to pocket.

Lingerie strap guard--a holder constructed inside the garment to keep lingerie straps from falling off the shoulders

Lining--inner layer of lightweight fabric cut from a lining pattern and sewn separately from the garment. The lining goes on the inside of the garment to conceal the construction seams, make the garment look nicer, and add to the durability of the garment. The lining also prevents skirts and slacks from stretching. In draperies, the lining protects the outside fabric, adds body, prevents fading, and adds drape-ability.

Lockstitch--stitch formed by a needle thread and a bobbin thread, as on a conventional sewing machine

Loop--fastener made of thread, cording, or fabric that extends past the finished edges of a garment on closings that do not overlap

Looper--an arm in the machine that makes a loop with its thread. The looper threads combine with the needle threads to make the stitches.

Machine hem--hem that is completely stitched by machine, usually at 10 stitches per inch. This may be a machine-made blind hem, a narrow-rolled hem, or a topstitched hem. It is found on sportswear and home decorator items such as curtains, bedspreads, and slipcovers.

Miter--diagonal seam at the corner used to eliminate bulk and make corner neat

Motif--print or design on the fabric

Napped fabric--short surface fabrics having fibers that lay smoothly only when brushed in one direction

Nonwoven interfacing--fabric which resembles felt and has no threads. Some types have directional stretch; some may be cut in any direction.

Notions--all the extras that it takes to make a garment or product: thread, zippers, hem tape, etc.

Overlap--amount of fabric required to cover the center of a drapery rod where one drapery lies under the other when closed

Overlock machine stitch--made with three or four threads; used to sew seams and simultaneously finish seam allowances

Overlock stitch--made with two threads on a conventional sewing machine; used to finish seam allowances and edges, not to sew seams

Panel or length--yardage or amount of fabric, in full widths, required for the complete length of the project

Partial roll collar--in the back half (usually) of the collar which lies against the neck. The rest rolls over and covers the part which lies against the neck. The front of the collar lies against the body.

Patch pocket--separate fabric piece attached to the garment

Pin baste--placing pins at right angles to seamline in seamline to hold fabrics together. Stitching is done while pins are in place.

Pin tuck--tiny, narrow fold stitched very close to the foldline

Pinked edge--notched edge finish made with pinking shears; used on fabrics that ravel easily

Pins--used to hold the pattern to the fabric while cutting and to hold the fabric pieces together during construction

Piped pocket--The opening is covered by lips of fabric similar to a bound buttonhole. This type is used in tailored garments or as decoration.

Piping--cord enclosed in bias fabric; similar to cording, except that a smaller cord is used

Placket--opening which makes room in a part of a garment so that the garment may be put on

Pleat--fold in the fabric made by doubling the fabric over on itself, resulting in three thicknesses of fabric. It is used to control fullness in a garment.

Point presser--piece of equipment shaped so that a right angle or sharp point can be easily pressed

Pounder or pounding block--smooth piece of wood used to flatten seams after pressing

Preshrink--to wash or dry clean fabric and notions before sewing them into a garment or product so that they will not shrink after they have been sewn

Press cloth--fabric placed between the garment and the iron during pressing

Pressing mitt--small piece of equipment that fits over the hand; can be placed inside the sleeve for steaming

Pressure--amount of force the presser foot puts on the fabric during stitching. Pressure should be adjusted to suit the fabric.

Prickstitch--decorative or functional handstitch used as an edge finish or to apply zippers in tailored garments

Quality characteristics--the traits of a fiber or fabric which make it desirable

Quarter-scale pattern--pattern that is a smaller, proportional (one-fourth of the size) version of a commercial pattern without seamlines

Raglan sleeve--a sleeve, with dart or seam on top, which includes part of the shoulder of the garment

Regular stitch--10 to 12 stitches per inch. Custom sewing may be done with 12 to 24 stitches per inch for a better appearance in some fabric.

Repeat--amount of fabric required to match exactly the motifs in a fabric when panels are placed side by side

Return--distance between the wall and the front of the curtain or drapery rod

Reweaving--restoring a woven fabric to its original design by hand sewing threads back into place; repairing a snag or tear in a woven fabric

Rick rack--zigzag braid available in a large variety of sizes and colors. It can be applied into a seamline or topstitched for trim.

Roll line--the line on which a lapel or collar turns back on itself in a garment; markings sometimes found on a pattern indicating the area along which the collar and lapel are turned back

Ruffle--band of fabric, either hemmed or doubled, that is gathered or pleated and applied to a garment's edge for trimming or decoration

Ruffling--edging which gives a graceful appearance and adds weight to curtains to make them hang and drape more attractively

Saddle stitch--decorative, topstitching technique done by hand; has longer stitches on top and shorter ones on the underside

Sash--part of the window that includes the glass and its frame

Seam--stitching which holds two parts of a garment together (usually sewn on a seamline indicated on the pattern piece)

Seam board--piece of equipment used for producing flat seams, especially on wools

Seam finish--treatment of a seam to keep it from raveling or fraying

Seam sealant--liquid used to secure the end of a seam

Self-fabric interfacing--interfacing cut from the fashion fabric; used when fashion fabric is very sheer

Sequins--small, shiny, flat circles sewn on to fabric in groups or designs as a decorative accent

Serger--another name for an overlock machine

Set--way a garment lies on the body

Set-in pocket--pocket which is placed into an opening created in the garment by slashing

Set-in sleeve--a sleeve placed in a regular armhole

Sew-in interfacings--fabric that must be stitched, by hand or machine, to the fashion fabric

Shank--a stem between the fabric and the button; may be part of the button or made with thread while sewing on a button

Shoulder pad holders--a cover of garment fabric to hold a shoulder pad or a fastening to attach pad to garment and remove it easily

Shrink--to become smaller permanently. Water, steam, or dry cleaning may cause fabric or fibers in the fabric to contract or re-align.

Sill--extended part of a window at the bottom of a window sash; similar to a shelf

Sizing--chemical and/or starch added to a fabric to give it stiffness and body. It can be used to make poor quality fabric appear better. Sizing usually comes out with the first washing.

Sleeve board--small pressing board providing a flat surface on which to press sleeve seams open

Sleeve cap--the curved upper part of the sleeve between notches on a pattern, which allows for fit at top of upper arm

Slipstitch--tiny, invisible handstitch taken through a fold of fabric; used for hemming skirts, attaching pockets, finishing off waistbands, putting lining in coats and suits, and tacking facings to a garment

Slopers--basic pattern shapes used to design and alter patterns

Smocking--embroidery done on a piece of fabric gathered by hand or machine into small, regular folds

Snap--closure made of metal in two parts, a ball and a socket; used in dressmaking to close an opening

Soutache or bias braid--braid trim cut on the bias to make it stretchy; used to form and outline designs on a garment (used in Spanish design garments)

Spaced tucks--where there is a predetermined space between each tuck

Stability--lack of stretch in the interfacing

Standing collar--lies against the neck (e.g., a mandarin collar)

Staystitching--row of machine stitching which helps garment maintain its shape while being constructed

Stay-taping--applying a piece of tape on a seamline to prevent stretching

Stitch--hand- or machine stitch used for hemming and holding facings in place. This stitch is invisible (or almost invisible) on the outside of the fabric.

Stitch finger--a small bar that holds the stitches while they are being formed and keeps them from pulling the fabric in at the edge

Straight ruffle--where fullness is cut in a strip and gathered using two to three times the length of the edge it will be sewn to

Straight stitch machine--a machine that sews a straight line forward and (usually) backward. Some are available with accessories to enable them to perform other types of stitching.

Stretch--amount of flexibility in the interfacing

Structural darts--darts which end at the fullest part of the body or at a body point

Tailor's ham--oblong, firmly stuffed cushion covered in fabric of half cotton, half wool. It is designed for use while pressing the curved areas of a garment.

Tailor's hem--special hem used in bulky and heavy fabrics that do not ravel

Tension--tightness of the upper (needle) and lower (bobbin) threads which interlock to form a stitch. When the two threads are balanced, they are drawn into the fabric to the same degree.

Topstitching--machine stitching parallel to a seam or finished edge of a garment for decoration or to hold a crease on a folded or pressed edge of a seam; done from the right side

Trim--to cut off part of the seam allowance

Trims--decorative extras, such as lace, braid, piping, and decorative stitches added to create interest and design

True seamlines--to redraw seamlines so that they are as even or curved as they were before the pattern was altered

Tubing--hollow cylinder of fabric used for button loops and decorative trim

Undercollar--sometimes called a collar facing; finishes the collar and conceals raw edges

Underlining--layer of lightweight fabric that is basted to the fashion fabric and sewn as one. The underlining is cut exactly like the fashion fabric. It is added for support and to prevent stretching and sagging.

Understitching--stitching which holds seam to facing or under collar

Uneven plaid--a plaid with an unbalanced design in the crosswise or lengthwise direction, or both

Upper collar--collar which shows on finished garment

Valance--separate ruffle at the top of the window or over a curtain

Velcro®--fastener made from two nylon tape strips of looped pile that intermesh when pressed together. One strip is fleece covered and the other is burr covered.

Vertical hemming stitch--durable, stable stitch best suited to hems where hem edges are finished with hem tape or stretch lace. This is an invisible hem on the outside. Only very small stitches show on the inside.

Waistband--part of a skirt, dress, or trousers fitted about the waist and made from a separate garment piece

Weight of interfacing--refers to the firmness or lightness, stiffness or suppleness of the interfacing; usually classified as light, medium, or heavy and suit weight or outerwear weight

Welt pocket--hidden pocket with a visible slit. This may be a single or double welt and is sometimes covered with a flap.

Woven interfacing--fabric with grain lines that must be considered when cutting

Yoke--a piece of fabric added to the top front or back, or both, of blouses and skirts; adds design, fitting, and strength

Zigzag machine--a machine that sews a straight line plus other types of stitches. Most zigzag machines make buttonholes, sew on buttons, make a blind hem, and make decorative stitches.

Zipper--closure made of metal or nylon chains attached to a tape so that it can be stitched into a placket

Zipper foot--small machine foot with one prong; used for stitching in zippers; usually adjustable for right or left side application